

GENERAL LIBRARY
UNIV. OF MICH.
JAN 8 1908

PUBLICATION
OF THE
AMERICAN ECONOMIC ASSOCIATION

THIRD SERIES
VOL. VIII, No. 4

ISSUED QUARTERLY.
PRICE, \$4.00 PER YEAR.

The Growth of Large Fortunes

A Study of Economic Causes

AFFECTING THE

Acquisition and Distribution of Property

BY

G. P. WATKINS, Ph.D.

NOVEMBER, 1907

PUBLISHED FOR THE
AMERICAN ECONOMIC ASSOCIATION
BY THE MACMILLAN COMPANY
NEW YORK
LONDON: SWAN SONNENSCHEIN & CO.

Entered as Second Class Matter at the New York, N. Y., Post Office, May 23, 1900

PRICE, IN PAPER, \$1.00.

AMERICAN ECONOMIC ASSOCIATION

Organized at Saratoga, September 9, 1885.

EX-PRESIDENTS

- | | |
|--------------------------------------------------------------|-----------------------------------------------|
| *FRANCIS A. WALKER
Massachusetts Institute of Technology. | ARTHUR T. HADLEY,
Yale University. |
| *CHARLES F. DUNDAR,
Harvard University. | RICHARD T. ELY,
University of Wisconsin. |
| JOHN B. CLARK,
Columbia University. | EDWIN R. A. SELIGMAN,
Columbia University. |
| HENRY C. ADAMS,
University of Michigan. | FRANK W. TAUSSIG,
Harvard University. |

OFFICERS FOR THE YEAR 1907

President

JEREMIAH W. JENKS,
Cornell University.

Vice-Presidents

DAVIS R. DEWEY,
Boston.

CHARLES P. NEILL,
Washington, D. C.

CHARLES B. FILLBROWN,
Boston.

Secretary and Treasurer

WINTHROP M. DANIELS,
Princeton University, Princeton, N. J.

Publication Committee

- | | |
|--------------------------------------------------------------------------|-----------------------------------------------|
| JACOB H. HOLLANDER, Chairman,
John Hopkins University, Baltimore, Md. | A. W. FLUX,
McGill University. |
| CHARLES J. BULLOCK,
Harvard University. | DAVID KINLEY,
University of Illinois. |
| JAMES W. CROOK,
Amherst College | WILLIAM A. SCOTT,
University of Wisconsin. |

Executive Committee

Ex-Officio Members—

- THE PRESIDENT
- THE EX-PRESIDENTS
- THE VICE-PRESIDENTS
- THE SECRETARY-TREASURER
- THE CHAIRMAN PUBL. COM.

Elected Members—

- FRANK H. DIXON, Dartmouth College
- HENRY C. EMERY, Yale University
- FRANK A. FETTER, Cornell University
- JOHN H. GRAY, University of Minnesota
- B. H. MEYER, University of Wisconsin
- HENRY R. SEAGER, Columbia University

Inquiries and other communications regarding membership, meetings, and the general affairs of the Association should be addressed to the *Secretary of the American Economic Association*, Princeton University, Princeton, N. J.

Orders for publications should be addressed to *The Macmillan Co.*, 65 Fifth Avenue, New York.

*Deceased.

PUBLICATIONS
OF THE
AMERICAN ECONOMIC ASSOCIATION

THIRD SERIES
VOL. VIII, No. 4.

ISSUED QUARTERLY.
PRICE, \$4.00 PER YEAR.

The Growth of Large Fortunes

A Study of Economic Causes

AFFECTING THE

Acquisition and Distribution of Property

BY

G. P. WATKINS, PH.D.

Copyright, 1907, by
AMERICAN ECONOMIC ASSOCIATION



CONTENTS.

CHAPTER I.

	Page
INTRODUCTION: THE NEED OF STUDYING THE SUBJECT AND THE MEANING OF THE PHRASE "LARGE FORTUNES".....	1

CHAPTER II.

THE FORMS OF OWNERSHIP AND THE INCIDENTS OF INCOME FROM PROPERTY, ESPECIALLY LARGE INCOME, IN THE LIGHT OF ECONOMIC HISTORY AND OF RECENT TENDENCIES.....	8
§ 1. Production and Acquisition.....	8
§ 2. Direct Income from Wealth and Abstract-Property Income	15
§ 3. The Incidents of Income from Property Historically Considered	28
§ 4. The Constituent Elements of Large Fortunes.....	37

NOTE TO CHAPTER II.

CORPORATE SECURITIES AND EVIDENCES OF INDEBTEDNESS IN THE UNITED STATES	52
----------------------------------------------------------------------------------	----

CHAPTER III.

RECENT ECONOMIC CONDITIONS AND TENDENCIES IN PRODUCTION AND EXCHANGE AS RELATED TO THE GROWTH OF LARGE FORTUNES	59
§ 1. General View of Large-scale Production and of In- cremental Income	59
§ 2. Landed Property	65
§ 3. Mineral Resources	88
§ 4. Foreign Investments	93
§ 5. Manufactures and Large-Scale Production.....	95
§ 6. Commercial Advantages of Large-Scale Business, including Combination	104
§ 7. Dynamic Conditions in Industry.....	106
§ 8. Transportation	108
§ 9. The Modern Commerce of Capital.....	110
§ 10. Speculation, Professional and Other.....	113
§ 11. The Economics of Government.....	121
§ 12. Interest Rates and Tendencies.....	125

§ 13. The Outlook for Small-savers and for the Small-propertyed Middle Class.....	130
Summary	140

NOTE TO CHAPTER III.

AN ANALYSIS OF LISTS OF MILLIONAIRES (COMPILED BY THE N. Y. TRIBUNE AND THE N. Y. WORLD) IN THE UNITED STATES	141
---------------------------------------------------------------------------------------------------------------------	-----

CHAPTER IV.

CERTAIN PECULIARITIES OF ECONOMIC HISTORY AND CONDITIONS IN THE UNITED STATES.....	148
§ 1. The Background	148
§ 2. Development of Great Economic Possibilities.....	150
§ 3. Socio-economic Characteristics of Americans.....	153

CHAPTER V.

SUMMARY AND CONCLUSION.....	157
LIST OF BOOKS AND ARTICLES CITED.....	164

CHAPTER I.

INTRODUCTION: THE NEED OF STUDYING THE SUBJECT, AND THE MEANING OF THE PHRASE "LARGE FOR- TUNES."

"The nature and causes of the wealth of nations" have long been subjects of scientific interest. It is to be expected that a science shall begin with the things most accessible to the understanding, that is, the merely objective parts of its field. Wealth as undergoing processes of production exhibits more kinship with physical phenomena than wealth in process of distribution, that is, as undergoing assignment to the uses and purposes of individuals. But it is time that the causes of the welfare and "fortune" of individuals should receive a share of attention. In relation to these causes arise those problems of distribution which are now the subject of lively and growing interest. Questions relating to the causes of large fortunes are also of immediate practical as well as of scientific interest.

No thorough study of the general subject of large fortunes has yet been made. It is necessary, therefore, to study not merely concrete conditions, but also general causes and underlying general principles. There is no possibility of appeal to an already developed and accepted formulation of these. Theoretical analysis, although it must assume some acquaintance with actual conditions, is a necessary preparation for the detailed study of the insistent facts.

Ours is an age of new and striking characteristics. Not all the differences, it is true, between present and

previous conditions, have come from the introduction of entirely new elements. But quantitative developments of things not absolutely new have been of themselves sufficient to give to long known factors a new face and a new power.

On the side of technology we are often told that this is the Age of Steel or the Age of Electricity. The world's production of iron and steel is about fifty times what it was in the year 1800. And the more highly manufactured product steel is becoming more and more *the* beneficiary of the universal application of the products of iron ore. Not only are the steel rail and the steel ship fundamental for modern transportation, but the structural parts of our machines, of our factories, and even of our homes are coming to be of steel. From the blade of Damascus to the steel frying pan is a long step into the Age of Steel. So much for the material. What of the motive power? Electricity has lately become the great means of transporting persons for short distances and is invading the general field of steam transportation. As a motive power in manufactures it has already achieved much and is gaining faster than any other form of energy. It lights our streets and many of our homes. And yet we are only at the beginning of the Age of Electricity.

On the social and economic side the age has its marked characteristics. There are more great fortunes, and there are greater fortunes, than the existing nations of the Western World have ever before known.¹ By abuse of political power Rome's proconsuls may have wrung from

¹ For certain salient points in the evidence for the increase of large fortunes and for the concentration of wealth, see an article by the writer on "An Interpretation of Certain Statistical Evidence of Concentration of Wealth," *Quart. Pub. Am. Statistical Assn.*, March, 1908.

subject peoples private fortunes as great as those of our own time. Modern great fortunes, however, have come as a phase of a beneficent process of industrial and commercial development. The causes of these fortunes are essentially economic rather than political. It is an obvious inference that their appearance is probably correlated with our modern developments in technology and industrial organization.

In technology and industrial organization the United States leads the world. In the size of its great fortunes, also, the United States appears to lead. In most respects the United States represents the "modern" tendency in the highest degree. It is therefore appropriate that, although the phenomenon which we are to investigate is general, the economic causes of large fortunes in the United States should be given special attention.

Large fortunes are the fortunes of rich men. English speech tends to develop a special term "riches"² to designate large fortunes, thus recognizing the distinctive character and the importance of this social phenomenon. In the conception of riches there are three elements that call for particular notice.

To be rich one must possess wealth or property in conspicuously large amount. The "large fortune" is a more or less relative quantity. The "rich" farmer would not be called rich in a great city. The rich of former days

²The process of differentiation between the meanings of the words "riches" and "wealth" is by no means complete and there is always operative against it the influence of certain foreign languages whose vocabulary is not so complex as ours. But one feels that such an expression as "national riches" is not good present-day English. The word "riches" is by origin and meaning an abstract term, and grammatically a collective noun. But usage, false to etymology, by treating it as a plural, gives to it a factitious suggestion of concreteness.

would not even be "respectably poor"⁸ in New York City to-day. It is necessary that the fortune be in any case sufficiently large to enable its possessor to live without dependence upon income from his own labor. But we have long passed the stage where to possess a competence is to be rich. A competence is an absolute amount and essentially a reserve and a provision for old age. Riches are relative and are conspicuously large. Where there are rich men, there are inequality and contrast of economic condition.

Riches yield a conspicuously large income to their possessor. The rich are rich in productive or income-yielding property, that is, in capital or capital-value. The income may, as in land speculation, take the form of an increase of value instead of an increase of goods. But a man is called "land-poor" who is unable at need to realize currently upon such an investment, even though it may be likely ultimately to yield a good return. The importance of this connotation of large income—for it is connotation rather than essential to the definition of large fortunes—can hardly be exaggerated.

Large fortunes are matters of private law. They are property. They pertain to particular persons. Goods or wealth as such need belong to no one. They are objectively and impersonally conceived. But riches are a private right and cannot be conceived without reference to an owner and to legal relations. Riches are personal attribute and power based on goods. Their conspicuous magnitude, however, differentiates them from small properties.

Riches, in short, are differentiated from wealth or goods *qualitatively* by the inclusion of a certain legal

⁸ The phrase some New Yorker, who was merely several times a millionaire, recently applied to himself.

viewpoint and relation. They are differentiated from private property in general *quantitatively* by their conspicuous magnitude, and by the consequent receipt of large income not due to labor. In the concrete, riches are large private fortunes.

A postulate of any scientific theory of the causes of large fortunes is that those causes are impersonal. That is, they must be such as permit of being made the basis of generalizations. "Pull" and privilege are not such. Neither can the causes of the change in the degree of development of riches lie in human nature or in inequality of natural endowment. Men in general are not appreciably different from what they have been. Changes in human nature, like changes of animal species, are secular. Inequality of faculties, it is true, may have become more effective. But if this is so, it must be because of changes in external conditions. These external causes are doubtless economic.

Not much weight can be given to the allegation that the men who get rich do so because of their unscrupulousness, or because their competitors are not given a "square deal", in other words, because of moral defects either in themselves or in those in power. Unscrupulousness and unfairness are not new. Nor are they of a nature to play a decisive part in any general social phenomenon. They do not determine the amount of the harvest from productive efforts. They probably affect but little the size of the shares to be distributed. They may affect considerably a particular individual's success or failure in getting for himself the larger share or the better opportunity. "Plunder" is both process and proceeds. But it is a process of transference of wealth, or of acquisition, not of concentration. The proceeds are conditioned by the amount of available material. There

is much more wealth to steal now and doubtless more stolen than formerly. It is probably also true that plundering is now better organized than formerly, for example, as monopoly or as "rigged" speculation, so as sometimes to reach out systematically to fleece many. It thus becomes sometimes a means of concentration as well as of acquisition. But increase in the scale and effectiveness of organization here are but a reflection of a general progressive tendency in economic society which doubtless multiplies much more the legitimately than the illegitimately obtained great fortunes.

It is quite possible that the makers of fortunes are men who, whether by nature or because of the straitened circumstances and narrow outlook of their early life, especially because of lack of educational opportunities, have a distorted perspective and a wrong scale of values, in which the material and pecuniary are given undue weight. But the decisive facts must still be the conditions under which they exercise their powers, or perhaps prove their limitations. The material opportunities are there. What particular individuals make the most of them and what qualities of mind and character enable them to do so are of much practical importance. How the successful individuals get the prizes is matter for moral judgment, for praise or blame. The business of economics, however, is only to show that the prizes are there and why they are there. We must seek the causes of the recent growth of great fortunes in conditions of production and accumulation. The causes of the general phenomenon are impersonal and economic.

The great impersonal economic causes of the growth of large fortunes the writer conceives to be simple and clear. The relative weight of the various constituents of the total wealth and property and the importance of the dif-

ferent kinds of income have been undergoing marked changes. As regards the character of ownership, there has been a shift from more democratic to less democratic, or less necessarily democratic, forms of property right. The craftsman working with his own tools and materials, and the tradesman with a watchful eye on the condition of each article of his stock of goods, have been largely superseded by the capitalist whose laborers own neither tools nor materials and who learns of the state of his property by following the stock-exchange reports in his newspaper. As regards the forms of production and of gainful occupation there has also been a shift from those where conditions are more democratic to those where they are less democratic, both as to technical requirements and as to organization. Power-driven automatic machinery has largely superseded tools, and the regimental organization of factory hands has hindered the all-round development of men. Finally the bringing of all goods to market and the measuring of all things in terms of money have put the man who knows markets—the “business man”—in command of the situation, while increasingly dynamic conditions in industry have multiplied his opportunities for gain. These are the fundamental clews to the argument of the following chapters.

CHAPTER II.

THE FORMS OF OWNERSHIP AND THE INCIDENTS OF INCOME FROM PROPERTY, ESPECIALLY LARGE INCOME, IN THE LIGHT OF ECONOMIC HISTORY AND OF RECENT TENDENCIES.

§ 1. *Production and Acquisition.*

The production of goods is the primary economic process. It is fundamental. But it is so fundamental, and remains so much merely at the beginning, that it is a poor example of the highly evolved processes that we regard as characteristically economic. Production is a physical fact. Only with the recent great development of the exchange economy has it come to be viewed by many as the creation, not of valuable things, but of an abstract quantum of value.¹ For most men it fortunately still remains the creation of valuable things. But the base of a structure never more than suggests some features of what it supports. It does not reveal the essential characteristics. For clues to the explanation of modern economic processes we should look to the market.

Production is the creation of valuable things, or of valuable capacities in things. But there are other ways of getting concrete valuable things. Exchange suggests itself as an obvious alternative. This normally supposes

¹ The importance given to this distinction in Böhm-Bawerk's discussion of the Productivity Theory of Interest is significant of the dominance of the market measure of things.

previous production in order to be able to render an equivalent. But this is not necessarily so. The smith acquires needed food by exchanging the implements and weapons he has produced. But his boy, while playing on the beach, may have found a pearl, and that also gives power of acquisition. The medicine man receives his means as a tribute to his supernatural power. The difference between producing valuable things and acquiring them through exchange is likely to involve important social relations.

Acquisition is reciprocal to production, the contrasted other end of the market process. It is primarily the obtaining of economic control of existing values.

Production and acquisition are different stages or phases of the economic life of goods. Production is the beginning of the economic process. Acquisition comes later and is looked at from the point of view of the culmination of the process. A good is produced once; it may be acquired many times. Acquisition is an economic-legal fact. The conception is closely related to that of private property. Indeed, there is a juristic theory that the essence of all private property is "occupation", that is, bare acquisition, whether with or without production. Acquisition is, at any rate, the threshold of private property right. Production, on the other hand, is economic-technical in nature, a process in which the physical facts bulk largest.²

The conception of acquisition rests upon that of exchange. Exchange of goods by their producer for goods wanted for consumption is the fundamental case of ac-

² The distinction between production and acquisition seems to be familiar in German economics, though not used exactly as developed here. Cf. Roscher, *Grundlagen*, Bk. IV, ch. i., § 148; also Philippovich, *Grundriss*, Bd. I, 2. Buch, § 39, "Produktion und Erwerb."

quisition. But the acquirer need not himself have produced the goods with which he acquires others. If he has produced still other goods, the equivalents of those he now parts with and themselves acquired by production, the relation to production remains the same. Acquisition may be any number of stages removed from production, and still production on the part of the acquirer may be its presupposition and basis. Such acquisition indirectly by means of production may be called acquisition by production.

Since acquisition is, in a modern economic society, almost inevitably, result and purpose of production, it is a very slight extension of the thought to apply the term to those cases of production where the product completes its economic period in the hands of the producer. In this case the two ends of the economic course of goods come together and coincide. The farmer may be said to "acquire" the products of his farm or kitchen garden. One is said to acquire whatever he obtains, whether by his own production or by exchange. Since, juristically, all economic goods have an owner, and ownership begins with their existence, all are acquired as soon as they are produced. In this usage acquisition becomes the broader term which covers all forms of production. Production by man is, from this point of view, only a very important method of acquisition.

It is obvious, once the distinction between the two is made, that there is no necessary coincidence or correspondence between facts of acquisition and acts of production. Acquisition may be by gift. And there are gifts from nature as well as from man. In the case of the gift from nature, of course, no one has produced that which is acquired. In the case of a gift from man the giver has usually acquired by production that which he

gives. But there is no act of production on the part of the receiver, no own-production. When attention is called to the fact that acquisition by inheritance is essentially acquisition by gift, it is seen how large a part acquisition without own-production plays in economic society. When we consider the amount expended by parents, without expectation of return in product or service, on the education of their children, we see, also, how fundamentally important for civilization and social progress are certain forms of acquisition without own-production and without remuneration.³

Acquisition is the broad genus of which acquisition by production and acquisition without own-production are sub-divisions. A man's production, moreover, is less inclusive than his acquisition by production. Production is the physical fact. It is the foundation, but only the foundation, of a series of legal and economic relations.

Economic evolution is, in one of its aspects, a process of development and superposition upon each other of successive modes of acquisition. This is in part only another way of looking at the development of the exchange economy. In the primitive economy most products, chiefly products of the soil, were consumed within the family or small social group where they were produced. Commerce was first developed only in some very valuable articles, chiefly the ornaments and luxuries of the rich. Later, as production became specialized, the producer exchanged more or less with other producers. With the development of modern means of trade and transportation, it has become the practice, even on the part of the agricultural population, to turn most products into money. These changes have become of decisive im-

³The great class of paid personal services may be left out of account for the purposes of the present essay.

portance quite recently. The number and the variety of middlemen have multiplied, and the proportion of the total product of human industry which they handle at least once—most of it many times—has vastly increased.⁴

Middlemen are still looked upon with suspicion by many of the "producing" classes. Though trade has established its standing in the opinion of men as well as in the world of facts, it has not altogether shaken off the traditional dislike of olden times. Nor was the unfavorable view of the ancients without reason. Trade involves profit from a succession of acquisitions by exchange. It is natural to view such a process as unproductive, for men do not readily see that goods may gain in utility without changing form. Mere speculative gains, too, have always been important for the merchant, and their economic and moral status is even yet not quite settled.

In the merely mercantile transaction the egoism of man is purer and clearer than anywhere else. The egoistic point of view dominates the market. That a man should have exclusive regard to his own ends in his treatment of goods is no ground of offense. But when, in his dealing with other men, he is guided merely by calculation of gain, he can expect little sympathy. Yet this tendency is what trade throws into the foreground. The merchant, moreover, is specially skilled in valuing and bargaining, and so his gain is often more than proportional to his service. There is more need of bridling the desire for gain in commercial dealings than in production in the narrower sense.

As regards the fundamental productivity of transpor-

⁴Cf. Bücher, *Entstehung der Volkswirtschaft*. He makes forms and degree of exchange the fundamental criteria of stages of evolution of economic society.

tation and exchange, however, modern scientific analysis has clearly established that much. They serve the important purpose of creating place- and time-utility. Still there is in trade a possibility of social waste, or worse, that is not present in strictly industrial activity. The trader seeks to supply not valuable things so much as abstract value. This latter he may increase by decreasing the supply of valuable things. If custom, or other factor, gives him any monopolistic power, he has a motive to increase profits by keeping down supply. In trade, furthermore, competition often takes a form that causes an increase of outlays until cost equals return, instead of a form that reduces the net return through increasing the supply until price declines to cost.

We have followed far enough for present purposes the development of the distinction and difference between production and acquisition. We are concerned with it here only in relation to the causes of large fortunes.

The freeing of acquisition from the limitations of own-production is a fundamental fact in relation to the size of incomes and possessions. If whatever is acquired through own-production may be supplemented by other kinds of acquisition, it is obvious that the possibility of large acquisitions is multiplied. So far as production remains individualistic—as consumption must always remain—the difference between the productive powers of one pair of hands and those of another, like the difference in digestive capacity between two stomachs, cannot be very great. Neither such power nor such capacity, however, sets appreciable limits to degree of inequality in acquisitions. The modern organization of industry on a large scale has, by making the plans and decisions of one mind the critical factor in the joint productive operations of thousands of hands, enormously increased

the possible value of an individual's effort. But it has not yet fixed the market value of the productive powers of any man at more than about \$100,000 a year. Yet there are many men with incomes many times that sum, incomes of course not imputable to their own productive effort and often acquired with an entire absence of personal effort. What does a difference of a hundred or two hundred times amount to in comparing the many who possess only their personal effects, with the millionaire? There are doubtless men living in the United States to-day who possess 50,000 times the property of the average American farmer—the man of our propertied middle class. On comparing for large classes inequalities of income from labor with inequalities in the possession of property and thus in the receipt of its income, we find a great difference. The man just inside the upper tenth as regards the receipt of salaried income is twice as well off as the man at the middle of the line. This is the condition among the employees of the greatest industrial corporations and among male teachers in the public schools of our cities—two representative classes. In mere wages, as tested by various occupations requiring all degrees of skill, the multiple is somewhat less. But, in respect of skill, the multiple is somewhat less. But, in respect of property and its income, the man just inside the upper tenth is perhaps *ten times* better off than the "middle" man as regards the possession of property. The man who is one in a hundred in respect of the amount of income received from personal effort may be three times as well off as the middle man of his kind. But the man who is one in a hundred in the matter of the possession of property is perhaps *one hundred times* better off than the middle man as regards the possession of property.⁵

⁵ Following is a table of selected cases to illustrate characteristic

Income from personal effort is subject to an economicotechnical limitation which hinders concentration. It is in the field of income from property or capital that acquisition without own-production finds its great scope and causes the increase of large fortunes.

§ 2. *Direct Income from Wealth and Abstract-property Income.*

There are two ways in which the ownership of instruments of production, or of an equivalent, may be made

degrees of inequality in the distribution of the two different kinds of income. The test employed has the advantage of brevity as well as that of making possible the convenient use of certain material from the 12th Census Special Report on Employees and Wages by Professor Dewey.

The data for the first division of the table are obtained from the above mentioned Report at pp. 616, 624, 640, 666, 668, 672, 674, 685, 764, respectively. These are the occupations for which wages of as many as 5000 males 16 and over are reported for 1900. Rates for iron and steel mills, given in the Report for two weeks, as used in the table have been divided by two.

On the basis of facts furnished by Mr. George W. Perkins, Mr. E. J. Edwards, in the *American Monthly Review of Reviews* for September, 1905, p. 341, reports as follows: "Upon the pay-rolls of that [United States Steel] corporation, not including those who earn what is called wages, there are to-day 166,205 names. Of these 122,690 receive salaries of \$800 or a little less; 43,987 receive salaries ranging between \$800 and \$2500; 1308 receive salaries ranging from \$2500 to \$5000; 156 receive salaries ranging from \$5000 to \$10,000; 51 are paid salaries ranging from \$10,000 to \$20,000; and 13 are paid salaries of \$20,000 or more." The total is evidently a misprint for 168,205. This must include many female employees.

The approximate median and approximate upper centile are obvious from inspection of these figures. I interpret the phrase "receive salaries ranging between \$800 and \$2500" in the light of the context to mean that the \$800 salaries are put in the class below and the \$2500 salaries in the class above. An estimate of the amount of salary that marked the upper decile might be obtained by assuming an even distribution between these two limits. The arithmetical operations required would then be indicated thus: \$2500 —

to yield income. The owner may himself superintend the processes and administer the instruments of production, that is, he may act as entrepreneur; or he may give into the charge of another the active direction of industry and retain for himself only a specified amount of income, with security for his principal. From this point of view there are two kinds of capitalistic income, the one involving active participation in industry, the other not.

$(15292/43987 \times 1700)$ equals \$1909. But the assumption is obviously false, for the number of salaries becomes progressively more numerous as the specific amount becomes less. Experience with such a type of distribution indicates that it is fairer to assume that the number of cases decreases regularly in a geometrical rate, instead of arithmetically, with each equal step upwards in salary. The number receiving a salary one step above that of any class will probably be nearer to an unchanging fraction (say $\frac{1}{2}$) of the lower class than to an unchanging absolute number. According to this assumption what is wanted is the number of which the logarithm is: $\text{Log } 2500 - [15292/43987 (\text{Log } 2500 - \text{Log } 800)]$. The number is 1682. The upper decile is thus estimated at \$1682.

The data for teachers are obtained from tables at pp. 17, 19, and 21 of the National Educational Association's Report of the Committee on Salaries of Public School Teachers. The statistics for female teachers are excluded on account of being not comparable for present purposes with other statistics used. The classes of the original tables are of conveniently small range; hence, since there is probably a great deal of concentration on the round numbers at the class limits, approximate percentile figures are here used without attempting to get more definite results by interpolation.

The data for Massachusetts probated estates are to be found in the report of the state's Bureau of Statistics of Labor for 1894. The percentiles are obtained by the use of the logarithmic method described above. These Massachusetts figures conform by actual test to the assumption involved, that is, the average of each class of estates as arranged by size is practically always nearer to the geometrical than to the arithmetical mean between the limits of the class.

The data for France are for the years 1903 and 1904 and are from the *Annuaire Statistique de la France*. They have been used in the form compiled by the writer in his article on Statistical Evidence of Concentration of Wealth. They are obviously much more inclusive

A related distinction is implicitly contained, though not clearly developed, in the use made of the words property and wealth. Wealth is concrete. It is a collection of goods. "Property", on the other hand, is an abstract legal conception. It is a *right*, specifically differentiated as a right or claim to *wealth*. Economics is primarily interested in wealth, that is, in goods themselves and in what is to be done with them. Property law is concerned

of small estates than the Massachusetts figures, and they are net and thus more accurately representative of actual values for such estates.

DATA FOR COMPARING DEGREES OF INEQUALITY IN THE DISTRIBUTION
OF INCOME FROM LABOR WITH DEGREES OF INEQUALITY IN THAT
OF PROPERTY AND INCOME FROM IT.

*Distribution of wages (per week) of males, 16 and over, in various
lines.*

	Number of cases	Lower decile	Median	Upper decile	Upper centile
Cotton mills	5,038	\$4.50	\$7.00	\$12.50	\$22.50
Woolen mills	5,023	5.50	8.50	14.50	25.00
Agricultural implements	14,807	8.00	11.00	15.50	20.00
Car and railroad shops.	11,435	7.50	11.00	17.00	22.50
Foundries and metal working	43,343	6.50	11.00	18.00	25.50
Iron and steel mills....	26,183	5.00	11.00	19.50	42.50
Shipyards	10,873	7.50	12.50	18.00	24.00
Breweries	4,660	9.50	14.50	18.50	25.50
Tanneries	6,010	6.50	9.50	13.50	20.50

Distribution of salaries (per year) in the U. S. Steel Corporation.

Number of cases	Median	Upper decile	Upper centile
168,205.....	A little less than \$800	Calculated at \$1,682	A little less (?) than \$2,500

*Distribution of salaries (per year) of male public school teachers in
467 cities of the United States.*

Number of cases	Lower decile	Median	Upper decile
6,744.....	\$650	\$1,200 (plus?)	\$2,000 or above, perhaps \$2,300

with rights in, or claims to, goods. The *thing* is wealth, and property right is but a relation to it, and that not necessarily close and active, but often held in reserve. It is an abstract right to the usufruct of goods which remains even when every particular period of concrete use is sold.

Abstract-property income and direct income from wealth are names descriptive of the two different sorts

Distribution of property in estates probated in Massachusetts.

Years	Number of cases	Lower decile	Median	Upper decile	Upper centile
1829-31.....	3,698	....	\$936	\$7,299	\$50,000
1859-61.....	6,922	....	1,784	13,390	125,400
1879-81.....	11,142	....	2,240	19,510	184,400
1889-91.....	14,608	....	2,386	18,740	166,000

Distribution of property in estates in France according to net value.

Number of cases	Median	Upper decile	Upper centile
767,633.....	1,292 francs	16,290 francs	199,300 francs

In making the comparisons made possible by this table the criterion must be relative, not absolute. Convenient relative numbers are the ratio of the upper decile, or the upper centile, to the median. It will be observed that, in the statistics of wages, the upper decile is always somewhat less than twice the median, and in one occupation of the nine it is little more than one-fourth greater. In the distribution of salaries the upper decile is approximately twice the median, the inequality thus being not greatly different from that prevailing among wage-incomes. But there is a great gap between this and the prevailing distribution of income from property. In the Massachusetts probate statistics the upper decile is eight or nine times the median, and the error is doubtless in the direction of under-statement, since the figures are not net, so that large deductions for debt should be made from the smaller estates, and also since many very small properties do not pass through the courts. Among French estates the upper decile is thirteen times the median. More reliable tests, less influenced by the above mentioned sources of error, indicate a considerably less degree of concentration in France than in Massachusetts or Great Britain. (See the writer's article cited above.) The present method is not applicable to the British statistics, where small estates are given only gross while large estates are given only net. If exactness be insisted on, allowance

of capitalistic income.⁶ The entrepreneur's income is partly income from personal exertion, but he also has, to the extent that he employs his own rather than borrowed capital, capitalistic income in the form of direct income from wealth. The "money-lender", or the bondholder, and, for the most part, the stockholder, derive abstract-property income from their capital. The line between the two cannot be drawn with absolute sharpness, for the investigation and knowledge incidental to intelligent placing and withdrawal of investments passes over by indefinable gradations into the actual oversight of industrial processes. The extensive legal right of the stockholder of a large corporation to determine the administration of his own property is, however, in abeyance, and is intended to be so, except at critical occasions in long intervals.

The line of distinction between the two forms of capitalistic income is the less definite because the differentiation is a rather recent development, and the process is not yet completed. Abstract income from property is still with difficulty conceived by itself. Men still incline to the "whole-produce-of-labor" theory; they think man is the only economic cause, that only he can produce income, and that whatever assistance the human producer gets from things merely increases *his* production. Hence they are especially prone to overlook the productiveness which is the foundation of abstract-property

must be made for the fact that there are many more families without appreciable income from property than without income from labor. It is safe to say that for the upper decile to be actually only ten times the median in the case of any considerable body of statistics of the distribution of property the inequality must be unusually small.

*While income from property, as the term is commonly used, is not exclusive of direct income from goods, the term abstract-property income may well be restricted to this one species of capitalistic income.

income. But capital does produce. Whether the owner is absent or is directly associated with the production does not affect this fact, though it does make it necessary to distinguish two sorts of income from capital. Though in practice doubtful cases will be found, the criterion of the distinction is clear. The crucial question is whether an owner himself administers the productive instruments from which he derives an income; or whether, giving over to others the possession and management of the productive wealth, he retains for himself only certain property rights and a corresponding income, which is usually fixed and often as far as possible without risk.

The gradual differentiation of interest from profits in the development of economic theory has been a reflection of the factual evolution of abstract-property income. The "profits" of Adam Smith⁷ and the English classical school are direct income from other than landed wealth, including also what is due to the administrative activity required. Only with the development of modern methods of production involving the use of borrowed capital, and with the payment of interest for loans as an established institution, has the entrepreneur come to charge himself interest for his own concrete wealth employed in production under his own management. This he does as a matter of bookkeeping, and in view of the possibility of lending the money.

The acute stage in the prohibition of "usury" came at the beginning of the separation of abstract-property income from the administration of productive wealth. Capital had attained to such importance as made the separation of its ownership from its administration a fruitful device in the association of productive instru-

⁷ For his undifferentiated view of interest, see Bk. I, end of ch. vi, of the *Wealth of Nations*.

ments with corresponding capabilities. For real estate the need was met by the creation of rent-charges and by the development of the mortgage under cover of a pretence of sale. For money lent at interest adaptations and evasive devices were more complex. Men have always cherished a dislike for derivative income, of which abstract-property income is the great modern instance.

Tools are usually directly and democratically owned. The capitalistic requirements of modern industry, however, are such that it would be impossible for the needful enterprises to be carried on by single entrepreneurs or small partnerships supplying their own capital. The legal evolution of abstract-property income has been just as much a condition to the existence of modern industry as have been invention and the applications of physical science. The distribution of ownership does not coincide with the distribution of ability, not to speak of inclination, to administer the instruments of large-scale production. Effectual inequality in both these powers has put an end to that rough coincidence in their distribution which goes with comparative equality in both. By devices of the market, developing parallel with exchange in general, the functions of the one-time capitalist-entrepreneur small master have been divided, so that capitalist and entrepreneur or manager are different persons associated only through contractual relations.

The mere capitalist is not confined to the technical lending of his capital to active entrepreneurs. Many of the devices which make the capitalists legally not creditors, but owners, of a business enterprise, are economically still bases of merely abstract property, as much as is the debt secured by mortgage. The issuance of preferred stock as a part-substitute for bonds—a favorite device of recent American financiering—is not intended to give this

class of investors more, but rather less, power to interfere in the management of the business. The holders of cumulative preferred stock have an income often practically as definite and secure as bondholders, and likewise limited, but they frequently have no vote in the election of directors and they have not the power to change the management of the business by putting it into the hands of a receiver.⁸ The "holding-company" is another device sometimes used to put a large body of stockholders in the position of mere receivers of interest without the privilege of instituting bankruptcy proceedings. This is but one form of centralized control, of which the voting trust is another. But the use of the proxy, by which executive officers provide automatically for their own continuance, serves nearly as well.⁹ Even directors of the corporation often have little to do with its affairs.¹⁰

If the stockholders are thus often in effect creditors, bondholders, on the other hand, have sometimes furnished initial capital. American railroads have often been started with enough actually paid-in "capital" for a margin to encourage creditors, and then have done most of

⁸ Preference shares with cumulative dividends "really take the place of bonds, and are to be so considered in theory." Greene, *Corp. Fin.*, p. 8. Cf. also Jenks, *Trust Problem*, p. 84, where he says the purpose of preferred stock is to give actual contributors of capital some priority in claim on returns, while not leaving them the power to put the company into the hands of a receiver.

⁹ Cf. Davis, *Corporations*, II, p. 278.

¹⁰ On this point the statement of Mr. Jacob H. Schiff is noteworthy: "The system of directorship in great corporations of the city of New York is such that a director has practically no power. He is considered in many instances, and I may say in most instances, as a negligible quantity by the executive officers of the society. He is asked for advice when it suits the executive officers, and if under the prevailing system an executive officer wishes to do wrong or wishes to conceal anything from his directors or to commit irregularities such as have been disclosed here, the director is entirely powerless." Testimony before the Armstrong Committee, p. 1299.

their construction even with money procured by the sale of bonds. In recent purchases of industrial plants for combination, it has been the practice to pay for visible capital in bonds.¹¹ The speculative element, the capitalization of "hopes", appears, in the modern plan, to be the stuff of which common "capital" stock is made. The business may later "grow up" to its capitalization, in which case the common stock becomes legitimately marketable with the investing public.

There are, moreover, means of making regular and calculable the income from common stock. American industrial and railway corporations are about as likely to increase their "physical valuation" by applying earnings to improvement and to new construction as by the application of the proceeds of additional issues of securities. An old-established and conservatively managed concern will also accumulate reserves to make possible the payment of dividends in lean years.¹² This is the policy pursued by some railroads, notably the Pennsylvania. The United States Steel Corporation is now¹³ accumulating a reserve instead of paying dividends on common stock. Thus a company's stock is made more acceptable to the outside public, which attaches most importance to secure and definite income. The investing public has a strong appetite for abstract-property. The abstract-property character is what makes government bonds so much sought. "Gilt-edge" securities in general are those which approximate closest to this ideal.

¹¹ Cf. Conant, *Atlantic*, Feb. 1906, p. 233b.

¹² Professor Meade, in his book on Trust Finance, especially chapter IX, emphasizes the importance of a reserve. He proposes, as a sufficient remedy for over-capitalization and speculative management, the legal requirement of a large reserve, as high as 50 per cent. for manufacturing companies.

¹³ Written in the spring of 1906.

All things considered, not much is left, from the economist's point of view, of the distinction between the stocks and the bonds of corporations. The significant fact, from this point of view, is that they are both mediums of abstract-property income. The divisible bonded debt is only the extreme case of a type of "paper" abstract property. The same large-scale production which makes the corporate form of organization natural as a means of bringing together the needed capital, makes it impossible for the stockholder, even if he desires, to know much of the actual conditions of the enterprise, as an institution for production. The stockholder is rarely an administrator of productive wealth.

Corporate ownership and organization of business is a dominant fact in modern industry. Nothing has been more characteristic of the development of industry during the past fifty years than the substitution of the corporation for individual and partnership management of business and the development of the corporations thus substituted into great and powerful organizations.¹⁴

Limited liability and informal transferability of shares, the latter facilitated by sub-division into small values, are the legal characteristics of the modern business corporation. The former was known to the Roman law, and in a crude form in the mediæval and Continental *commenda*. It was given renewed vigor by the business needs that began to be especially felt in the middle of the nineteenth century. Informal transferability of shares was brought into prominence by Law, and thereafter suffered an eclipse until the nineteenth century.¹⁵ The "joint-stock"

¹⁴ The sentence is from E. R. Johnson, *Ry. Transp.*, p. 69. It would be easy to find many other equally emphatic and authoritative statements.

¹⁵ Van der Borcht, Conrad I, 176a, and Juraschek, Conrad I, 228b.

companies of "merchant adventurers" of the seventeenth century in England were forerunners of the modern business corporation, without possessing fully developed either of its advantages.

Insurance and banking were conspicuously fields of corporate enterprise in England in the eighteenth century. Adam Smith's opinion as to where the joint-stock companies can be successful indicates the state of development in his time. He names banking, insurance, canal, and water companies as such, with the proviso that great capital be required.¹⁶ In the early part of the nineteenth century transportation companies were preëminent. An act of the legislature was still necessary for the formation of a corporation. The formation of a company with limited liability without further formality than registration was not possible in England until 1855.¹⁷ How rapid has been the recent growth of the business corporation is evidenced by the multiplication of the paid-up capital of British companies, excluding railroads, five or six times in the last twenty-five years.¹⁸

¹⁶ *Wealth of Nations*, Bk. V, ch. I, pt. III, art. I.

¹⁷ Napier, p. 391.

¹⁸ Following is a statement of the capital of companies registered in the United Kingdom under the Companies Act. This does not include railway and canal companies and others incorporated by special act of Parliament.

Total amount of paid-up capital of all registered companies having a share capital and believed to be doing business at the undermentioned dates (*Statistical Abstr. of the U. K.*, 41st No., p. 193; 53d No., p. 307. The figure for 1877 is from Goschen, 1887, p. 606):

April, 1877.....	Pounds	307,108,446
" 1884.....	"	475,551,294
" 1887.....	"	591,508,692
" 1892.....	"	989,283,634
" 1897.....	"	1,285,042,021
" 1902.....	"	1,805,141,165
" 1905.....	"	1,954,337,135

The business corporation was practically unknown in the United States in colonial times. Perhaps half a dozen

The increase has been regular and uninterrupted. In twenty-five years it amounted to nearly 500 per cent. From 1885 to 1902 Giffen's estimates allow a liberal increase of 50 per cent. in the wealth of the United Kingdom. From 1884 to 1902 the increase in this sort of corporate issue was 280 per cent.

For Germany we have statistics which are not entirely comparable with the foregoing, but which are in themselves significant. The paid-up capital of *Aktiengesellschaften* at the dates specified was as follows (Van der Borcht, I, 194. To obtain the figure for the earliest date I have estimated the nominal capital, not paid-up, for insurance companies, at 300 million marks, following a suggestion of the figures themselves):

1886-7	4576 million marks
1891-2	5771 " "
1896.....	6846 " "

Van der Borcht adds that, of the companies whose dates of foundation are ascertainable, three-fifths were founded within the last fifteen years. (Same, p. 195.)

For France the classified returns from the succession tax evidence a great increase of corporate securities along with other forms of *valeur mobilier*. (See footnote, pp. 49-50, below.) But the government bond is what is especially important in France.

For the United States I know of no means of directly measuring the increase of securities, though something may be inferred from facts relating to their existing amount and kinds, which are presented in the note appended to this chapter. Listings on the New York Stock Exchange of issues for new capital (compiled from the *Commercial and Financial Chronicle*, vol. 61, p. 1138; vol. 81, p. 1822; vol. 83, p. 1561) were as follows:

1886-1890 incl.—Bonds.....	929,040 thousand dollars.		
Stocks.....	446,325	"	"
	1,375,365	"	"
1891-1895—Bonds.....	857,107	"	"
Stocks.....	403,939	"	"
	1,261,046	"	"
1896-1900—Bonds.....	784,268	"	"
Stocks.....	807,574	"	"
	1,591,842	"	"

joint stock companies, none of them important, were chartered before the Revolution.¹⁹ Incorporation under general laws conferring limited liability was not practiced until the middle of the nineteenth century. When more than two thirds of the manufacturing interests of the country were already in the hands of corporations, Mr. North, on the basis of the Census figures for 1900, speaks of the relative importance of the firm and limited partnership as still "rapidly diminishing".²⁰ Corporations now dominate in industry, and corporate securities are the principal mode of investment.

Through the growth of forms of abstract property, the possibility of dissociating the receipt of income from the cares of administering productive wealth has become practically complete. It is obvious that there is nothing in the nature of things to set a limit to the possible aggregation of such income. The ownership of concrete goods is comparatively unsuitable for agglomeration. The cares of oversight so increase as to destroy the motive to it, and the leakage in the return also increases, no matter how good the oversight. The appetite for inactively acquired income, on the other hand, is not thus limited. It is of course not confined to the rich, as is testified by

1901-1905—Bonds.....	1,608,093	thousand dollars.		
Stocks.....	1,099,308	"	"	"
	2,707,401	"	"	"
1906—Bonds.....	303,112	"	"	"
Stocks.....	237,480	"	"	"
	540,592	"	"	"

These statistics of listings, and also amounts of dealings in stocks, suggest that the tendency is not less strong towards the increase of securities here than elsewhere, though such statistics give no clew to the actual quantities existing.

¹⁹ Cf. S. Williston, pp. 165-6, and Baldwin, pp. 268-271.

²⁰ 12th Census, vol. VII, p. lxxi.

the growth of the modern trust company, if not of the savings bank—for its deposits are largely reserves for consumption. The owner of a small property is thus relieved of the care and responsibility of choosing his investments. The owner of large property is likewise relieved of caring for what is already accumulated, so that he is able, at will, either to do nothing, or to center his attention on further increase of riches.

§ 3. *The Incidents of Income from Property Historically Considered.*

In little developed stages of social evolution the possession of riches and of ruling power have gone together. Nowadays political power and conspicuous income from property have become more and more separate. This is largely due to greater security and to a more public-spirited administration of governmental functions. The rich man does not now so much need political power in order to retain his riches, and the servants of the state do not so much use their power as personal perquisite and license for extortion. An alliance between the ruling classes and the rich, and mutual give-and-take arrangements, are still by no means unknown. But the two classes are now always separate in thought, because they are, on the whole, separate in personnel. Even the tradition of needful magnificence or "state" for the high public official has suffered much decay.

In the more settled condition which succeeds that where the strong right arm and ready craft unite riches and political power, the function of getting leaders and rulers tends to lapse, and a hereditary social and political hierarchy is established. This stage is also past. The lament for feudal and patronal institutions will always be echoed in romantic minds. But a roseate view of the

older condition always supposes and assumes the right fall of the die in the matter of birth—a contingency from the results of which society may be thankful to be in part relieved. Certainly the distribution of political and social functions, and of the means and reward for their performance, can be better adjusted than by a system of hereditary castes, or by feudalism. The disintegration of an all-round personal relation of lord and man into a series of specific functional adjustments was, in the process of social evolution, bound to come. Nobles and gentlemen abdicated their political functions, in the first instance to an absolute king, but ultimately in favor of the people. Economic-administrative functions they have also passed on to others as opportunity developed. Noblemen that have retained their estates are now hardly distinguishable from the merely rich, unless it be by the fact that their functional past is farther away.²¹

Feudalism was an attempt at functional adjustment of the relation of social classes, and at fixation of incomes accordingly, where political and general-social determinants of economic conditions were still dominant. Income from land was the only recognized form of income of considerable amount not resulting from personal exertion. Hence military and political functions, being themselves as yet of no settled economic character, went with the ownership of land.²² Or, looked at from another

²¹ The dependence of riches upon political relations, and upon the state when developed, did not suddenly cease. Cf. d'Avenel on the fortunes of the *ancien régime* in France, *Revue des Deux Mondes*, esp. March 15 (1906), circa p. 307.

²² Feudal landowners "are not the members of agricultural groups; they are professional soldiers or servants of the State, who treat their land as a reward and guarantee of service to the king." E. Jenks, *Law and Politics in the Middle Ages*, pp. 216-7. Curious instances of the favoring of the political classes as regards income are found in the rates of interest fixed by Justinian's Code, and in

point of view, it is perhaps also true, that the land-owners, being the only active leisure class, were the only ones able to exercise the honorific offices of war and government. Sovereignty and land-ownership were fused, and both were regarded as private property. Office and receipt of income from land were treated alike as personal rights and passed on by inheritance. The concreteness and universality of the relation of lord and peasant involved the fusion of economic, political, and social elements.²³ This was essential to the conception of it, as being a complete personal, instead of an abstract and official, relation, economic or other.

The *ideal* of feudalism, barring evil results of the accident of birth, was good.²⁴ In a simple social state such a system may work well. Though mediaeval relations were largely determined by physical force, the arrangement was not without plan—to be seen at least in retrospect—and did have a place, and even rights, for the less favored classes. But the plan was not of an economic nature. The comparative brutality of slavery, as revived and practiced in American negro slavery, was doubtless largely due to its being a purely economic institution, without

mediaeval instances of rents varying with the social class of the payer after the manner of regressive taxation. The exemption of nobles and clergy from taxation in France and elsewhere, before the Revolution, had not always been mere abuse of power and privilege.

²³ "The essence of the feudal organization of society was that it rested completely on land-tenure, and on one system of land-tenure—a system in which ownership was divided between the actual tenant of the land and the lord 'of' whom he 'held' it, and in which the relation as to land was accompanied with a close personal tie between the lord and tenant, involving mutual duties and responsibilities." Ashley, *Essay on Feudalism*, pp. 45-6.

²⁴ Cf. Cunningham: "So long as economic dealings were based on a system of personal relationships they all had an implied moral character." I, 465. Schmoller defends feudalism as a satisfactory functional arrangement for the times.

the political and social aspects of, for example, mediaeval serfdom. Under complex modern conditions an analytic adjustment of men's relations is much more likely to be just.²⁵

In no respect was the classical English economics more at fault than in assuming the universal applicability, without qualification, of the Ricardian theory of rent. Though it is not true that a knowledge of modern rent is worthless or worse for an understanding of mediaeval conditions, the differential return to land is not the clew to the nature of mediaeval rent. Agricultural land was the great original *res frugifera* or source of permanent income from property. The rent charge was a recognized form of such income when "usury", or interest on money or fungibles, was condemned.²⁶ Rent was the important original form of income from property, and, as we have seen, the basis of feudal society. The peasant's labor could, in ordinary years, raise more than was necessary for bare subsistence. Hence part of his time might be devoted to cultivating his lord's land. This is the crudest form of rent, that is, labor-rent. Or the same end of realizing income from property might be obtained by letting the peasant cultivate more land and taking from him part of the product. More important, perhaps, were various dues and fees that custom required the peasant to pay to the *seigneur* at every turn. The burden was laid on persons rather than on the land.²⁷ Laborers could produce more than their own maintenance. The economic process stopped about there. The peasants, for

²⁵ Locke's feudalistic scheme of government for the Carolinas was an entire failure, for one reason because it was feudal and unanalytical of relations. Cf. the Fundamental Constitutions of Carolina.

²⁶ Ashley, *Ec. Hist.*, II, p. 410.

²⁷ Cf. d'Avenel on the importance of the "*domaine direct*" as compared with the "*domaine utile*," *loc cit.*, March 15, pp. 284 and 280.

various reasons, political rather than economic, could not retain this surplus as their own. Whatever the cultivation could spare was applied to support feudalism. "Economic rent" may have been about equal to this, but its existence could not be clearly distinguished till later. The peasant could not hide his gains nor carry them away. Markets developed slowly and only as feudalism declined. The lord, in theory at least, gave the peasant something in return for what he took. It seems but just that those who could not give their services to the state should pay taxes for, and *to*, those who did. For the rent was, to all intents and purposes, a tax.²⁸ The land tax is the most general and persistent form of taxation known to history. Its only competitor in point of antiquity is the capitulation tax. It is sometimes difficult to determine whether a payment was rent due to the ruler as proprietor, or a tax, that is, a contribution to the support of government, especially since government was at one time in effect a private enterprise.

The extension of the use of money and of pecuniary methods and standards in business has been a phase, and also an instrument, of the decline of the all-round personal relation of ruling and subject classes.²⁹ The market point of view has been steadily gaining ground since the close of the middle ages. This development has met with fewest obstacles in America. Money-exchange and credit

²⁸ "The peasant's share of taxation, paid through the landlord, was probably the original element in rent." Cunningham, I, 462. Compare also the mistake of the English administration in India in making landlords of the Zamindars of Bengal, originally tax-gatherers. See Baden-Powell, *Land Systems of British India*, vol. I, p. 187-8.

²⁹ "The intervention of money brought with it the possibility of close bargaining." Cunningham, I, p. 464. "Medieval economy with its constant regard to the relations of persons" is contrasted with "modern economy which treats the *exchange of things* as fundamental." P. 464.

practices have increased the relative weight of the commercial point of view. This of course gives great advantage to mercantile talents. Though this situation contains some undesirable elements, it is an inevitable result of complexity of social life and of an analytic treatment of social relations.

In the evolution of the partnership, especially in mediaeval times, under the influence of the condemnation of usury, we find good illustration of the differentiation of economic relations. The mediaeval craftsman received income from all the sources distinguished by modern analysis:—his investment in real estate and in tools and materials, his own labor, his skill in managing and marketing. But his income was not thought of as other than homogeneous. In the original "company" of relatives and messmates, which was based on natural or general social ties, with the members sharing the work and its results, there was an attempt to reckon a separate return to capital. But the function of furnishing capital could not long remain merely a subordinate incident of personal participation in work. According to the mediaeval view, however, the capital could not be *lent* at a fixed rate of interest, or without sharing the risk. This meant that, though the inactive capitalist *might* not share in the management of the investment—for it was supposed that normally he would—he *must* share in the uncertainty of its results. He must remain owner of the particular concrete productive capital.⁸⁰ Thus the canonists sought specifically to prevent that abstract-property relation which is the very essence of modern financiering. The *commenda*, which was the form of partnership characteristic of mediaeval times, was but a crude device to differentiate the capitalist, who was often necessarily inactive

⁸⁰ Ashley, II, 419.

by reason of distance, perhaps on account of marine ventures, from the entrepreneur. The problem of separating property right from the administration of productive wealth had not then reached its modern dimensions and had not forced a more satisfactory solution.

As other sources of riches, besides land, developed into importance with the rise of industrial and trading classes, there came the inevitable clash between the newer economic power and the older feudal ruling class. This could have but one issue. Economico-technical developments have sustained the power of the captains of industry and business men. Since the industrial and political revolution of a century or so ago, laws and customs and opinions have been more and more adjusted to a segregation of economic from other relations and to giving freer scope to economic factors. The land itself has been gradually "mobilized".⁸¹ Thus of late economic or economico-legal causes have possessed the field as the unhampered determinants of the growth of large fortunes.

Modern economic organization has more and more completely released the rich from functional requirements and from the necessity of personal efficiency in order to keep what is acquired. This is as true of extra-economic, that is, of political and social, as of economic activity. Specialization and the growth of the learned professions, not less fundamentally than popular government, have made it less true that mere superiority of economic position is of itself a calling to lead and to rule. While the possession of means is still a great advantage, the rich are rather at a disadvantage in comparison with the chil-

⁸¹ Or the law relating to land has been. "Romanized," as certain German opponents of the movement toward the free individualistic treatment of landed property contend.

dren of families of smaller means in preparing for the more strenuous professional careers. Hence President Eliot's lament that the rich to-day have no calling.³² The development of abstract-property income out of direct income from wealth is one phase of the process of social evolution away from feudalism. Economico-legal developments have facilitated the ownership of income-producing value quite dissociated from any other and more exacting duty than the receipt of income. Both qualitatively and quantitatively the opportunity for the accumulation of riches has greatly broadened in the last century, and especially in the last half-century.

Capital as well as labor produces. Physical forces and things, as well as man, are economic causes. They participate in production, and to certain of them, as well as to the men who contribute their exertions, must be imputed a portion of the joint product. But while income is to be imputed to the natural and artificial agents and materials necessary to production, it is actually *paid* to the owner of them. Men and things produce; but *only men acquire*.³³ Income from capital is not acquired by contemporaneous production. In the case of abstract-property income, not the slightest participation in production is required. The receipt of income from capital, therefore, does not check itself by the labor incident to its receipt. Hence its accumulation and concentration are not subject to limitation from within.

Not only as regards contemporaneous production, but even as regards production in the extended sense, in which the producer and owner of capital may be said to produce the income resulting from such capital, it cannot

³² The address on the Present Disadvantages of Rich Men in American Contributions to Civilization.

³³ The producer of capital may, by extension of meaning, be said to produce the interest received from it afterwards.

be said that the income from most capital goes to its original producers. The reason is conclusive. The original producers and accumulators of most capital are dead. The inheritor of capital gets just so much of a start in the race for riches or for more riches, and thus a further cause of economic inequality is added to whatever personal business ability he may possess. Even without personal ability, he may thus acquire by inheritance without production an assured income so large, and with its maintenance so well provided for, that further growth of riches may be a matter involving no real personal sacrifice.

The amount of concrete wealth that a man can have or wish to have is limited by the responsibilities involved in utilizing it, a function which can never be wholly delegated to others. The development of abstract property removes this natural limitation on the agglomeration of riches and makes degree of accumulation more exclusively dependent on commercial instincts. The number representing a man's property interests can take on a few more figures without appreciably increasing the amount of care required. A foundation of paper, or other, abstract property once started, the increase of the amount of riches so composed may proceed smoothly. The care of it may be turned over to financial experts. Even in this respect, small savers, perhaps from salaries, are at some disadvantage, for in order to have safety they must take the savings-bank rate. On the subjective side, as regards capacity to make sacrifices, they are better equipped for the competition than the rich. But they have only begun to interest themselves in abstract property. Whatever may be the future, so far it appears that the great fortunes have been those chiefly benefited by the evolution of abstract property.

§ 4. *The Constituent Elements of Large Fortunes.*

Three possible constituent elements of riches are: consumers' goods, concrete possessions of producers' goods, and abstract property in means of production.

The sum of values contained in goods ready for consumption and in the hands of the consumer can only be matter of conjecture. It is probably greater in proportion to population than it was fifty or a hundred years ago, but on the average not very much greater. An urban and industrial population has a greater tendency to live from hand to mouth as regards concrete supplies, giving over to dealers the function of keeping "stores". The custom of providing large stores of linen and bedding—especially in preparation for marriage, perhaps large enough to last the couple for life—declined along with the practice of spinning in the household. For the rich, no doubt, accumulations of consumption goods are absolutely greater, but still, *a priori*, we should hardly expect a marked increase to be characteristic of the present age. Pomp and plenty and love of display are more characteristic of the rich of barbarous ages and peoples. Doubtless in the finer forms of art there has been an increase in values, but rather by a bidding up of prices through increased numbers of the rich than by changed tendencies in their expenditure. The same may be said of the value of dwellings, but this is for present purposes hardly to be regarded as of a non-investment character, since realty is so decidedly a commercial asset. In terms of value, the less cost of goods produced under the factory system should bring about a decline in the per capita of consumables.

There is clearly a tendency to an increase in the importance and relative amount of producers' as compared with consumers' goods. This is characteristic of the present

age of "capitalism", in which the workman tends to become the adjunct of the machine. Capital played but an insignificant part in the handicraft economy of the middle ages. While the difference cannot be measured statistically, the present requirement would doubtless be expressed as many times a multiple of the mediæval outlay, rather than as a percentage increase. Even a decade now brings a notable increase.

An estimate for Great Britain and Ireland shows an increase in the *income* from capital in 59 years of about two hundred per cent., while population increased fifty-six per cent.³⁴ Taking account of the fall in interest

³⁴ The table below is derived from British income-tax statistics by following a method of Giffen's. He assigns certain schedules and items to one or the other class of incomes and divides others according to a fixed proportion.

AN ATTEMPT TO DISTINGUISH "INCOME FROM IDLE CAPITAL (including land) from income which is derived not so much from the capital itself as from the labor bestowed in using the capital," and thus to separate the former from other sorts of income reported in the gross income-tax schedules of the United Kingdom.

Year.	From Capital. (million pounds)	Per cent. of Total.	Ratio to Pop.	From salaries, etc. (million pounds)	Per cent. of Total.	Ratio to Pop.	Total. (million pounds)	Pop. (in thous.)
1843.....	188.5	66.9	70.2	93.5	33.1	34.8	282	26,841
1862.....	252.5	70.1	86.5	107.5	29.9	36.8	360	29,183
1881.....	407	69.7	116.6	177	30.3	50.7	584	34,885
1901-2...	560	64.7	133.9	306	35.3	73.2	866	41,831
% last of first...	298			327			307	156

The figures for '43, '62, and '81 are those calculated by Giffen and presented in the Jr. Roy. Stat. Soc., 1883, pp. 617-8. The figures for 1901-2 were obtained from the U. K. Statistical Abstract for 1903 (pp. 38-9) by following the same method, and assuming that Schedule B is to be apportioned the same as in 1881. Of course they are only rough approximations, but the error should be in the same direction in all cases and hence should not affect the comparison appreciably. Values are given in nearest millions of pounds. Population is added for purposes of comparison. It is estimated by simple arithmetical interpolation, for the census, not for the fiscal, year.

rates, the corresponding capital must have increased much more. Great Britain, too, was the leader in industrialization and much farther advanced than any other country at the earlier date. In 1688 the per capita wealth of England was 60 pounds. In 1800 that of Great Britain, after making allowance for a change in the value of money, was equivalent to 113 pounds. Giffen's estimate of 1885 gives 270 pounds per capita for the United Kingdom and 415 pounds for England by herself. At this date 85 per cent. of the total was income-yielding capital. For 1901-2 Giffen's estimate assigns to the United Kingdom a per capita wealth of about 360 pounds.³⁵

It is not impossible that income from labor is increasing at a slightly more rapid rate in the United Kingdom than is income from capital. But it should be expected, as a result of improving methods of administration and other causes, that the gross assessments to the income tax are becoming more and more inclusive of the incomes of the British people. The growth of the salaried class must tend to bring more incomes from labor into both the gross and the taxed assessment. It is predominatingly labor incomes that are about the margin. Hence it is not proved that income from labor has been increasing at a more rapid rate than income from capital. Even if it has, the rate of growth of income-yielding property must still be considerably more rapid than is the increase of labor income. For the rate of interest has been declining decidedly, as is proved by prices of British Consols, and yet the amount of interest-income has greatly increased, and the proportion of interest to all income assessed has barely declined. The amount of capital must have increased very greatly.

³⁵ Giffen estimated the value of the United Kingdom "as a going concern" for the year 1885 at 10,000 million pounds. Of this he says 8,500 million pounds was income-yielding capital. (*Growth of Capital*, p. 28.) His most recent estimate, for the year 1901-2, puts the sum at 15,000 million pounds. If the proportion of income-yielding wealth remains the same—we should expect it to become slightly larger—it is 12,750 million pounds.

Some earlier estimates are accepted by Giffen as reliable and comparable with his own. For 1688 Gregory King's estimate was 320,000,000 pounds, or 60 pounds per head for England, as compared with the 1885 average of 270 pounds per head for the United King-

In the United States the per capita wealth has apparently been multiplied very nearly four times in the last half century, from \$308 in 1850 to \$1318 in 1904.³⁶ Whether the per cent. that is income-yielding has changed is a question. It has probably not changed enough to affect appreciably the comparative figure for successive decades.

Capital is more important than ever before, both in production and in distribution. Since consumers' goods are in general more personal and less disposable with reference to time and place as regards the benefit they may yield, they are, on the whole, less susceptible of concentration than producers' goods. This refers to the dom and 415 pounds for England alone. Giffen thinks "the question of changes in the purchasing power of money does not affect the comparison." (*Ibid.*, pp. 75, 80, 82.)

Beeke's estimate for 1800 is, Giffen believes, after deducting the national debt and the like, "on all fours" with his own estimates (pp. 95, 100). This assigns to Great Britain—the estimate does not include Ireland—1740 million pounds. This is 170 pounds per head. Allowing for a rise in prices of 50 per cent. per head (p. 99), the per capita amount would be 113 pounds, as compared with King's 60 pounds per head. To compare the 1800 estimate directly with that for 1885, there should be allowance for a *fall* in prices (p. 111).

³⁶ For the United States we have no such data for measuring the growth of capital as for England. There are only the census statistics of the amount of real and personal property for the last half century. These figures are as follows (11th Census, Wealth, Debt and Taxation, Pt. II, p. 14; 1907 Report on same, p. 27; estimate of population in 1904 from Census Bul. 71, p. 16):

Year	Amount in millions of dollars.	Per capita.
1850.....	7,136	\$308
1860.....	16,160	514
1870.....	30,068	780
1880.....	43,642	870
1890.....	65,037	1036
1900.....	88,518	1165
1904.....	107,104	1318

The earlier figures are probably not so complete as the later.

physical side. On the economic side the modern mechanism of investment gives a sure reward for postponement of enjoyment. Hence conditions both negative and positive favor increased accumulations of producers' goods.

Within the sphere of capitalistic income, abstract-property income is of increasing relative importance. Abstract-property income is itself distinctly modern. The mediæval mind looked askance at such a thing. Attempts to suppress it were in a way successful. By enforcing most of the disadvantages of direct administration of capital and by adding some others, they caused a risk on the part of the mere "money-lender" and an irregularity in his income such as practically to destroy its abstract-property character. Government debts reached noteworthy dimensions a century or two ago,⁸⁷ and have since then been a settled form of investment, always increasing in amount.⁸⁸ These for long held the field as the dominant type of sources of abstract-property income.⁸⁹ The nineteenth century saw an enormous development of transportation companies, whose stocks and bonds, where such undertakings are not governmentally owned, have now become the principal form for such investment. In the United States more than one-tenth of the total wealth of the country is represented by the single item of steam railroads. "Industrials" have only recently acquired some

⁸⁷ Contemporaneously with this and before, property in purchasable offices was important. D'Avenel, perhaps exaggerating, estimates their value in France at the time of their suppression by the Revolution at 8 billion francs.

⁸⁸ For statistics of debts see below, footnote at p. 122.

⁸⁹ It is noteworthy that Hamilton assumed in his statement of the advantages of a funded public debt—which he claimed facilitated business enterprise through making possible the ready provision of capital as needed—that there existed no other form of transferable security in appreciable amount. See the Report on Public Credit, Works, II, p. 52 ff.; also the Report on Manufactures.

standing with the "general public" of abstract-property seeking investors. But the United States Steel Corporation has a capitalization of a billion and a half, and the market value of its securities is now "growing up" towards a billion dollars. The corporate form of industrial organization was until recently so little a matter of course that it was not until 1855 that the most advanced of industrial countries provided for incorporation with limited liability by registration under general law instead of by special Act of Parliament. The states of the United States and other countries have done the like. Hence the stock-and-bond, that is, the abstract-property, character, of the organization of modern commercial and industrial enterprise.⁴⁰ There is also the tendency to get from real estate an increasing yield of abstract property by way of the mortgage. An ever greater part of property and capital is passing over into the form of "paper property".⁴¹

This great growth of intangible "wealth" has of course been reflected in economic theory. Hence the doctrine that "capital" is an immaterial sum of value to be conceived separate from its concrete embodiment. Among contemporary Americans, Professors Clark and Fetter are the leading advocates of the view that makes it simply abstract quantum of income-yielding value.

The commonness of the designation "capitalist", its comparatively recent origin, its connotation that the one to

⁴⁰ Giffen (*Growth of Capital*, p. 47) found that, in the interval of ten years between a former estimate of the wealth of the United Kingdom and his estimate of 1885, there was a change in the public estimation of forms of investment such that land sold for fewer years' purchase and stock exchange securities for more.

⁴¹ Schmoller estimates that 100 years ago "perhaps a few" (vielleicht einige), to-day in Germany 17 per cent., in England 40 per cent., of all wealth has taken the form of negotiable securities. Grundriss, p. 642.

whom it is applied is not only a possessor of some capital but is rich,—all these things suggest a direct connection between the growth of capital and the increase of large fortunes. Large-scale production is inimical to the small owner of concrete capital. The great increase of capital in response to modern technological requirements, at least in those stages of its development so far reached, has meant an increase in the number of the rich. Not only the growth of capital, but also the shift in modes of ownership, within the sphere of capital, in the direction of abstract property, has been such as to favor large accumulated acquisitions. This appears actually to have been the dominant tendency in developments up to this time, though it is not essential to the nature of abstract property. Unlike concrete wealth, which carries with it the responsibility of administration, abstract property is susceptible either of indefinite and equal subdivision, or of any degree of concentration.

It is difficult, on account of the necessity of being content for the most part with statistics in which the only distinction is between realty and personality, to establish with absolute convincingness a greater tendency to concentration in the ownership of abstract than of other property. City real estate may have substantially the nature of abstract property. Ground rents are clearly abstract-property income. Under personality, on the other hand, are included not only stocks and bonds, but furniture and personal effects, which are the most concrete of concrete wealth. It is thus strongly significant that, although very small estates are most likely to consist of nothing but personality, the very large estates have a much larger proportion of personality than the smaller. In New York State three-fourths of the value of large estates, those of \$50,000 or more, is personality, and one-

fourth is realty. In the small estates, those under \$5,000, these proportions are reversed, three-fourths being realty and one-fourth personalty. Probably more than four-fifths of the personalty of large estates is paper property, that is, notes and mortgages, stocks and bonds, and the like.⁴² The amount held by the average owner of Amer-

⁴² Certain statistics of probated estates in New York are especially important, because they show the proportions of personalty and realty in large and small estates respectively, and thus indicate in which form of property there is the greater tendency to concentration. (The 1894 Report of the Bureau of Statistics of Labor of Mass. classifies real and personal estates separately by size, but gives only average values, not the numbers of estates in the different classes!)

STATISTICS OF LARGE ESTATES (*i. e.*, over \$50,000) Figures for the
of decedents in NEW YORK CITY for the two same less the
years Oct. 1892 to Sept. 1894. (Spahr, Distri- Gould estate.
bution of Wealth, p. 60.)

		Per cent.		Per cent.
Number	631		630	
Total value	\$210,052,938		\$138,052,938	
Realty	48,056,562	23	46,056,562	33
Personalty	161,996,376	77	91,996,376	67

The Gould estate contained \$2,000,000, or 3 per cent., realty, and \$70,000,000, or 97 per cent., personalty.

STATISTICS EXHIBITING THE DISTRIBUTION OF PROPERTY IN ESTATES, WITH DIVISION INTO PERSONALTY AND REALTY, for October, November, and December, 1892, compiled from the records of 36 counties of New York State. (Spahr, footnote, p. 64.)

Estates.	Number.	Per cent.	Totals.	Per cent.
\$50,000 and over.....	116	3	\$28,215,274	67
\$50,000 to \$5,000.....	768	23	10,811,845	26
Under \$5,000	2467	74	3,187,300	7
	3351		\$42,214,419	
Realty.	Distribution per cent.	Personalty.	Datbn. per cent.	Per cent. within classes. Realty. Personalty.
\$9,532,540	59	\$18,672,734	72	34 66
5,640,408	34	5,171,437	20	52 48
1,165,965	7	2,021,335	8	37 63
\$16,338,813		\$25,865,506		

ican railway stock is probably not less than \$20,000.⁴³ The average value of the American farm with its buildings is a trifle less than \$3,000. The common belief that

Spahr (pp. 64-5) believes that these figures cannot be accepted as representing the exact truth, and suggests the following modifications, for the reasons given: "(1) The small holdings of real estate should be increased about one-half, because of the failure to record real estate in many of the rural counties. It is chiefly the small holdings of realty that fail to be recorded. [An executor must give bond in proportion to the *personalty*.] (2) The small holdings of *personalty* should be reduced about one-half, because the returns cover the gross possessions of the decedents. The small estates are preëminently the estates of borrowing shop-keepers and farmers. Often the payment of their debts leaves no *personalty* whatever, and lessens the amount of realty. Large holdings, on the other hand, are returned as low as possible, in order to avoid the inheritance tax on personal estates above \$10,000. All the surrogates' clerks reporting, state that the small estates are somewhat smaller than returned, and the large estates somewhat larger. No correction, however, need be made in the aggregate holdings of any class. It is only the relative proportions of realty and *personalty* that need to be changed." The corrected table, with percentages added, follows:

Estates.	Realty.	Per cent. distribution.	Personalty.	Per cent.	Per cent. within classes.	
					Rlty.	Pers.
\$50,000 and over	\$2,250,000	33.3	\$6,750,000	73.0	25	75
\$50,000 to \$5,000	3,000,000	44.5	2,000,000	21.6	60	40
Under \$5,000 ...	1,500,000	22.2	500,000	5.4	75	25
			<hr/> \$6,750,000			
			<hr/> \$9,250,000			

This is the table which Spahr holds to be representative of the distribution of wealth in the country at large, New York City having a higher degree of concentration. Spahr does not appear to relate this noticeably greater degree of concentration in *personalty* to the enormous increase in the amount of *personalty* in the last century. To do so is a great step towards explaining concentration. The last "corrected" table is all the more significant because Spahr makes no use of the greater concentration of *personalty* resulting, so there is no likelihood of bias in the change. The increase in the proportion of *personalty* with the increase in the size of the estate is much more uniform after the correction. But it may very well be that there is a larger percentage of *personalty* in very small estates, since they must consist mainly of personal effects, furniture, tools, and the like, all of which are concrete *personalty*.

the ownership of paper property is greatly concentrated is well grounded.

The fact of a tremendous increase in personalty, of

Even for the larger estates the difference between realty and personalty as regards degree of concentration does not express adequately the tendency of abstract property, for the ownership of urban realty is likely to take on abstract property characteristics. The value of urban realty also, like the amount of paper property, has increased at a disproportionately rapid rate in the last half-century. Further tables which suggest certain significant comparisons between city and country as regards what economic classes are most likely to acquire the different kinds of property are given elsewhere in this essay. (Footnote at pp. 80-1.) It appears to be difficult for small property-holders to acquire realty in a large city like New York.

It would be desirable to separate the figures for the ownership of legal claims upon wealth, "paper property," that is, from other personalty. But in the larger estates personal effects are of relatively little weight, and it is doubtless the abstract personalty that accounts for the concentration.

It is unfortunately not possible, though the data are to be had from existing records, to give detailed statistics of the components of estates by size. The writer has collected the following facts for appraised values of estates recorded in the surrogate's office at Ithaca, N. Y. The estates to which they relate are 28 in number, and exceed \$10,000 in value, three being over \$50,000, the largest of which is \$71,182. In this number are included all estates recorded at Ithaca up to the spring of 1906 and since the state law has required accurate appraisals of real as well as of personal property, the period covered being thus about two years. Following are the classified values of these estates:

	Amounts.	Per cent.
Realty	\$192,696	23.5
Urban	\$129,642	15.8
Rural	63,054	7.7
Personalty	625,879	76.5
Personal effects, stocks of goods, and implements	24,205	3.0
Cash and deposits.....	80,657	9.8
Bonds, stocks, mortgages, notes, and interest on same.....	509,896	62.3
Insurance	11,121	1.4
Totals	\$818,575	100.0

which there is clear evidence in all the statistics obtainable, is to be associated with its high degree of concentration. This increase, we know, has been an increase of paper

It is not in the least probable that the proportions of the different kinds of property owned by individuals in the county as a whole at all correspond to these. The figures suggest that to-day even a well-to-do middle propertied class must be based upon abstract property. The statistical basis is too small for a general conclusion, but the figures presented are of considerable symptomatic value.

Is it claiming too much to assert that it is the duty of the State of New York to compile and classify the excellent material recently accumulated in its surrogate court records in a way to show the present ownership by economic classes of the different kinds of property? Such statistics would be of great value from the point of view of financial administration as well as of extraordinary scientific interest.

* Statistics of the number of stockholders of American railways in 1904 were compiled by the Interstate Commerce Commission. (58th Congress, 3rd session, Senate Documents No. 188, p. 1.) The number was 327,851. Doubtless there are many owners of stocks of several railways counted twice. Some of the holders must be corporations. Railway corporations are doubtless included in the number. In the case of stock in the hands of trustees, the Commission has included the number of beneficiaries, so far as ascertained, instead of the number of trustees. At this time the par value of the stocks of the railways of the United States was \$6,339,899,329. (Rept. on Statistics of Rys. for 1904, p. 292.) This gives \$19,338 of stock for the average stockholder, making no allowance for duplications. The amount of stocks not owned by railway corporations was \$4,397,040,970. (Statistics of Rys., p. 58.) The quotient of this amount divided by 327,851 is 13,412. The true quotient for individual holdings is between 19,338 and the smaller number, doubtless nearer the latter, since the holdings of one railroad in the stock of another are usually either nil or large. But the true quotient is not the true average. Probably most individual owners of railway stock own in more than one railway. The stock of American railways as a whole, too, appears at this date to have been somewhat above par, since the par of railway securities owned by the public was then \$9,585,467,711. (Stat. of Rys., p. 58), while the commercial value of railways was \$11,244,852,000. (Census Bul. 21, p. 8.) The average owner probably possesses more, rather than less, than \$20,000 worth of such stock. There is thus little ground for the claim that the ownership of American railways is greatly decentralized and an interest of the people rather than of the rich.

property. A century ago, though public debts were already of importance, this development had scarcely begun. The title to not less than half of the total wealth of the United Kingdom has now taken this form.⁴⁴ The pro-

The amounts in which United States bonds were held by private individuals in 1880 should also be noted. The average for male holders is \$7742; for female holders, \$3081. But 830 male and 168 female holders of over \$50,000 each owned \$176,239,350 and \$23,344,900, respectively, out of a total for males of \$327,185,500, and a total for females of \$90,353,350. (10th Census, vol. VII, p. 491.) Bonds issued by the government of his own country are in general the favorite form of abstract-property investment for the conservative person of small means.

*The relative amount of personalty and the rate of its increase may be exhibited statistically.

Porter, in 1843, on the basis of probate statistics, estimated the value of personal property in Great Britain at 1,200,000,000 pounds for 1814, and at 2,000,000,000 for 1841. (Vol. III, p. 127.) Of this Scotland had somewhat more than one-twentieth. Porter adds (p. 128) that 760,000,000 pounds is the amount due the national creditors, which factitiously [*sic!*] raises the amount of personal property. The great proportion of government bonds in the personalty is notable. The proportion was not less—the debt was actually somewhat greater—in 1815, hence the growth of personalty other than government bonds was greater than appears. The value of real property for England and Wales Porter estimates for 1841 at 1,563,500,750 pounds (p. 136). So the value of the personalty already somewhat exceeded that of the realty. There is probably some duplication in these figures, and more likely an overestimation of realty, from our point of view, and an underestimation of personalty. In 1841 England was far ahead of other nations in industrial and commercial development. Her large manufacturing capital was chiefly concrete personalty and her transportation and many other commercial enterprises were already organized as joint-stock companies.

The situation some sixty years later is indicated by the following statistics. The capital value upon which estate duty was paid in the United Kingdom in 1902-3 was (Com. Inland Rev., p. 80):

Personalty	211,148,000	76.2%
Realty	64,436,000	23.8%
	<hr/>	<hr/>
Total	275,584,000	100.

portion of personalty which is abstract property approaches three-fourths. Of the productive capital of that country considerably more than half must be covered by securities and evidences of indebtedness. For France the proportion is not so large, being nearly two fifths, but it is rapidly increasing.⁴⁵ The tendency towards paper prop-

More than three-fourths of the property owned by residents of the United Kingdom is probably personalty. The figures for England alone are:

Personalty	180,022,000	77%
Realty	54,192,000	23%
Total	234,214,000	100

Changes in the character of the tax prevent carrying back the comparison in this form. Of course much real property owned by corporations is mobilized as stocks. But the form of ownership is the point in which we are interested. In such a case there is no duplication. In the case of mortgages there is more likely to be; but the above British probate statistics reckon only net values. There is much likelihood of some concealment of securities, and thus of a diminution of the apparent proportion of these.

Of the 182,452,479 pounds of personal estate situated in the United Kingdom passing by will or intestacy in 1902-3—that is, not including that situated abroad nor *inter vivos* gifts—about 70 per cent. as classified, is paper property. (Com. Inland Rev., p. 92.) This estimate reckons as paper property: stocks and funds of the United Kingdom, and of other countries, shares or debentures of public companies, mortgages, bonds, bills, notes and other securities, life insurance policies, ships or shares of ships—in all amounting to 125,600,000 pounds. Other items that are more than doubtful, especially the large amount of “cash at the bankers,” are reckoned as concrete wealth. So 70 per cent. is a conservative figure. 70-100 of 76 per cent. is 53 per cent. From this it appears that more than half of the total wealth of the United Kingdom is paper property.

⁴⁵ For France, in the official *Annuaire statistique de la France* for 1903 (Vol. XXIII, at pp. 66* and 67*) is a table relating to successions, from which the following data are extracted. Ratios are added:

erty is world-wide.⁴⁶ Though the obtainable data are not

Years.	Valeurs mobilières, fonds d'Etat, actions, obligations.	Per cent. later of earlier amount. For each division.	For whole period.
1851-5.....	102.9 mil. fr.	...	....
1874-6.....	516.0	501	....
1899.....	2081.6	403	2023
	Total biens meubles.	Biens meubles <i>not</i> valeurs mob. (i. e., dif. bet. preceding amounts)	Per cent. securities etc., of total personality.
1851-5.....	843.6	740.7	12.2
1874-6.....	2006.2	1490.2	25.7
1899.....	3724.0	1642.4	55.9
	Biens immeubles.	Per cent. later of earlier amt. Ea. div.	Whole per.
1851-5.....	1218.0	....	....
1874-6.....	2289.5	188.8	....
1899.....	3042.4	132.9	249.9
	Total successions.	Per cent. personality of total.	Per cent. securities etc., of total.
1851-5.....	2061.5	40.9	5.0
1874-6.....	4295.6	46.7	12.0
1899.....	6766.4	55.0	30.8

Thus is traced, with a high degree of certainty as to the proportions, the shift towards personality and towards paper property in France in the latter half of the nineteenth century. It is especially securities and the like that may be concealed to escape taxation, and they are therefore presumably underestimated in the above returns. And the method of assessment is believed to rate realty too high. (Foville, 1893, p. 602.) Thirty per cent. is probably a low figure for the proportion of *valeurs mobilières* to French wealth. Using Neymarck's figure of 90 billion francs for *valeurs mobilières* and assuming a total of 230 billions for the national wealth, we obtain, as the per cent of *valeurs mobilières*, 39.1. (Gide, *Principes d'économie politique*, ed. 1905, p. 407, uses this proportion. The figure for total wealth is doubtless Foville's increased a little for time elapsed. The 90 billions is Neymarck's estimate.) The proportion of the *productive capital* of France covered by paper property is of course much more than that.

France is not a land in which the corporate form of business organization flourishes as in the United States or Great Britain. Great Britain is probably also, as yet, a larger holder of foreign securities than France.

⁴⁶ For Germany it is not easy to test definitely the tendency to a

entirely to the point, the United States is probably not far behind France.⁴⁷ Clearly here is one important clew

disproportionate increase of personalty or of securities. I will give only the following summary statement of Schmoller (p. 642): "Christians has estimated for Germany 30 billion marks in German, besides 10 billion in foreign, securities, together 40 billion out of a national wealth of 175 or 200 billion marks. But in these 40 billions mortgages, savings-bank acknowledgements, and the like, are not included."

Neymarck in 1901 made the following estimates for securities dealt in and owned in various European countries (Bul. Inst. Internat. Statist., XIII, pt. III, p. 170):

	Total des titres appartenant en propre aux Nationaux.		Total des titres cotés.	
	(In billions of) Francs.	Dollars.	Fr.	Dol.
Great Britain	120	24	215	43
France	90	18	135	27
Germany	45	9	80	16
Total for above	255	51	430	86
Russia, Austria-Hungary, Netherlands, Italy, Belgium, Spain, Switzerland, Denmark, Sweden, Norway, Roumania, etc., together.....	87.4		132.7	
Grand total	342.4		562.7	

The listed values (titres cotés) result in part from duplications of securities listed in several countries, in part from extra-European securities in which European investors are somewhat interested.

In 1903 Neymarck expresses his opinion that slight additions should be made for the three chief holders above and for the small northern countries. (Bul. Inst. Internat. Statist., XIV, pt. III, p. 383.)

"For the United States there are no satisfactory statistics of the increase of personalty and of securities. For an attempt to get the proportion of the total wealth in the form of securities and the like, the reader is referred to the note at the end of this chapter. Census and other estimates of personal and real estate, based on property tax returns and the like, are not made from the point of view of the character of ownership, that is, they do not deduct from realty for mortgage debt or for the securities issued by corporations largely on the basis of real property. Hence they do not adequately exhibit the tendency towards abstract and paper property.

to the explanation of the increase of great fortunes. If there is much more personalty in the very large estates, the great recent growth of personalty accounts largely for the growth of large fortunes.

NOTE TO CHAPTER II.

CORPORATE SECURITIES AND EVIDENCES OF INDEBTEDNESS IN THE UNITED STATES.

Certain statistics, though not of the most satisfactory sort for the purpose, may be used to determine approximately the proportion of paper property to the total wealth of the nation.

The 1907 Report on Wealth, Debt and Taxation (p. 27) gives the following itemized estimate of the national wealth in 1904:

Form of Wealth.	Amount.
Real property and improvements taxed.....	\$55,510,228,057
Real property and improvements exempt.....	6,831,244,570
Live Stock	4,073,791,736
Farm implements and machinery.....	844,989,863
Manufacturing machinery, tools and implements....	3,297,754,180
Gold and silver coin and bullion.....	1,998,603,303
Railroads and their equipment.....	11,244,752,000
Street Railways	2,219,966,000
Telegraph systems	227,400,000
Telephone systems	585,840,000
Pullman and private cars.....	123,000,000
Shipping and canals	846,489,804
Privately owned waterworks	275,000,000
Privately owned central electric light and power stations	562,851,105
Agricultural products	1,899,379,652
Manufactured products	7,409,291,668
Imported merchandise	495,543,685
Mining products	408,066,787
Clothing and personal adornments.....	2,500,000,000
Furniture, carriages and kindred property.....	5,750,000,000
Total	\$107,104,192,410

Of these items, railroads, street railways, telegraph and telephone systems, Pullman and private cars, privately owned water-works, and central electric light and power stations may be put down as practically all property of corporations belonging to holders of securities. Together these amount to \$15,238,809,105.

Shipping and canals are a difficult item to deal with. For want of better data we may guess that one-half the amount is either directly owned by individuals or owned by the state, and the other half is owned by corporations. Then the item of paper property here is \$423,000,000.

The questions left to answer are: How much of the concrete personality, and how much of the real estate is owned by security-issuing corporations? How much of the value of real estate remaining is covered by mortgages? How much of the remaining amount of directly owned wealth has set over against it interest-bearing debt evidenced by notes secured by chattel mortgages or by commercial paper, etc.?

It is possible to get from the 1905 Census the comparative weight of incorporated companies and other forms of business organization for manufactures in the United States. The capital of the manufacturing establishments was then reported at \$12,686,265,673. Of this 82.8 per cent. pertained to incorporated companies, and the rest to forms of business organization classed as individual, firm, and miscellaneous. (Bul. 57, p. 14.) Eighty-two and eight-tenths per cent. of the above sum is \$10,304,227,977. Estimated on this basis and for a time of great prosperity, the market value of the securities of manufacturing companies ought to be more than that. In order to make the figure available for present purposes it should be reduced to date of 1904. The capital of manufacturing establishments in 1900, exclusive of hand-trades, was \$9,424,992,544 (12th Census, vol. VII, p. xcvi and p. 50). Excluding hand-trades the percentage of the value of products attributable to incorporated companies in 1900 was 64.6 (data in vol. VII, p. lxvi). In 1905 this percentage was 73.7 (Bul. 57, p. 14). Hence the capital of incorporated manufacturing companies in 1900 may be estimated as equal to

$$\frac{828}{737} \times \frac{646}{1000} \times \$9,424,992,544, \text{ or about } \$6,840,000,000.$$

One-fifth of the difference between this and the figure for 1905 subtracted from the latter gives \$9,611,000,000 as the value of the securities of manufacturing corporations in 1904.

The Census Special Report on Mines and Quarries for 1902 gives the par value of stock and bonds of dividend- or interest-paying mining and quarrying companies, reporting these data, as follows (p. 82):

Common and preferred stock.....	\$1,260,339,137
Bonds	264,323,081
Total	<u>\$1,524,662,218</u>

The corresponding data for natural gas and petroleum are reported separately as follows (p. 87) :

Common and preferred stock.....	\$256,612,860
Bonds	24,722,829
Total	<u>\$281,335,689</u>

Combined amounts are as follows :

Common and preferred stock.....	\$1,516,951,997
Bonds	289,045,910
Total	<u>\$1,805,997,907</u>

These statistics apply for only 1142 plus 248 or 1390 companies reporting dividends or interest, out of the 4876 incorporated companies reporting capitalization, of 5386 enumerated (p. 80). The 1390 reported as follows :

Dividends	\$72,416,913
Interest	13,603,924
Sum	<u>\$86,020,837</u>

Dividends and interest paid by the 1142 mining and quarrying companies (exclusive of natural gas and petroleum), that reported either the one or the other, amounted to 4.5 per cent. on the par value of stock and bonds issued (p. 84). Dividends and interest paid by the 248 natural gas and petroleum companies, reporting that item, amounted to a return of 6.1 per cent. on stock and bonds issued (p. 87). This includes the Standard Oil Company so far as it is a producer of crude oil. From the above it appears that the capitalization of this portion (the 1390) of the mining and quarrying companies is not very excessive. The market value of their securities should be perhaps a fourth below their par value. The other companies, those not reporting, are probably not so prosperous. By subtracting from the totals the figures for the above dividend- and interest-paying companies, we find the importance of these companies as capitalized.

Number of incorporated companies reporting capital..... 4876

Number of incorporated companies reporting dividend or int... 1390

Difference 3486

Common and preferred stock issued.	Bonds issued.
2,902,835,544	314,883,914
1,516,951,997	289,045,910

Difference, 1,385,883,547 Difference, 25,838,004

Aggregate par of stocks and bonds issued:

Incorporated companies reporting capital.....	\$3,217,719,458
Same reporting dividend or interest	1,805,997,125
Difference	<u>\$1,411,722,333</u>

These companies reporting capital but not dividends or interest are smaller and have a less secure position in the investment market than the others, as is indicated by the small amount of bonds issued. Together with the 510 companies reporting no data as to capitalization, these smaller companies may account for securities with a market value high enough to bring the total for mines and quarries to something above 2,000 million dollars in 1902.

Concrete "capital" of mining and quarrying establishments was not reported in 1902. In 1889 it was reported at \$1,287,709,840. Value of products was then reported at \$410,760,770. Value of products in 1902 was reported at \$796,826,417 (p. 6). If capital increased in proportion to value of products, it was about \$2,500,000,000 in 1902. Incorporated companies produced 86.3 per cent. of the value of the product in 1902 (p. 66). Two thousand million dollars, or a little more, thus appears to be a conservative approximate valuation for securities of mining companies in the United States in 1902.

To get a figure for 1904 we may assume that the value of issues of securities by mining and quarrying companies has grown in the two years at the same rate as that at which the entire industry has, on the average, increased its output for the period before 1902. The value of the securities in 1904 would then be

$$\frac{796,826,417}{856,221,132} \times \$2,000,000,000, \text{ or about } \$2,150,000,000.$$

The capitalized value of mining royalties is thoroughly abstract, and in effect paper property. Royalties and rents paid for all minerals, so far as reported, amounted to \$34,530,713 in 1902 (p. III). Their capitalized value in 1904 should be sufficient to bring the total of paper property supported by mines and quarries up to \$2,500,000,000 in 1904.

There are some very considerable corporations engaged in wholesale and retail trade. I know of no method of estimating the value of their property or of their securities.

The total capital stock of national banks, state, stock savings, private banks, and loan and trust companies in 1904 was \$1,392,494,972 (Comptroller, I, p. 426). We know that the shares of many national

banks are considerably above par, and probably the market value of the above total is par or more.

The stock of stock companies in the business of life, fire, and other insurance, and of stock companies doing business as building and loan associations, should be included here, but the data are not available.

In 1890 the mortgage indebtedness amounted to 16.67 per cent. of the value of all taxed real estate (11th Census Rpt. on Real Estate Mortgages, p. 116). And the percentage was relatively high in regions of denser population and in the better white farming sections, and low in the South—conditions which suggest an increase since that date. Sixteen and sixty-seven one hundredths per cent. of the value of taxed realty in 1904 is \$9,253,555,017. Owing to the methods of compilation adopted, the error, as with the debt on farms and other homes, which accounts for \$36,655,753,841 of the above total (1907 Report on Wealth, pp. 16-17), is probably in the direction of understatement. It is doubtful if the United States is so much better off in this respect than European countries. (Cf. p. 86 below). Borrowing as a means of increasing business capital we should expect to be more frequent. Americans, on the other hand, may be less inclined to accept a fixed charge for indebtedness as permanent, and they may be more able to work out of debt than the people of other countries. But the percentage of indebtedness has doubtless increased in the fourteen years following 1890. Statistics show an increase between 1890 and 1900 in the proportion of homes encumbered. (Cf. p. 86 below.) In the above total there is doubtless some duplication with our other figures of paper property. But the understatement probably much more than outweighs this. After allowing for possible duplication the indications of all the available data point to \$10,000,000,000 as a minimum amount for the item of real estate mortgages in the total of paper property.

Debt evidenced by commercial paper is not always so fully abstract property as some other forms, because of the large amount of care involved, at least in managing small loans. But it is all paper property. The debt of large corporations, whether supported by real estate or personalty, is nearly all represented by securities, though sometimes promissory notes are used. The debts of active business men administering their own productive wealth are very largely represented by loans of commercial banks. The loans of national banks on Sept. 6, 1904, amounted to \$3,757,929,371 (Rpt. Comptroller for 1904, p. 186). State banks exhibited loans other than on real estate amounting to \$1,596,211,527 (same, p. 406).

Of the total value of promissory notes held by individuals, including those secured by chattel mortgages, against property in personal

effects, such as clothing and furniture, in the stock and implements of agriculture, in the stocks, tools and materials of the hand trades and of non-corporate commercial and manufacturing enterprise, we know nothing.

The interest-bearing public debt of the United States in 1904 was \$895,157,440 (Statistical Abstract for 1904, p. 26).

In 1902 the public indebtedness of states and territories, counties, cities, villages, townships, precincts, etc., and school districts was \$1,864,978,483; and the corresponding figure for 1890 was \$1,137,200,090 (1907 Rpt. on Wealth, Debt, etc., p. 131). On this basis we may estimate the amount for 1904 as \$1,986,274,882.

Adding the above items of paper property, we get a total of \$47,400,000,000. This is approximately 45 per cent. of the total wealth of the nation in 1904. The percentage of paper property thus obtained is only a rough approximation to the truth, but it should be an underestimate. Perhaps the Census Bureau is rather generous in its estimates of the commercial value of transportation and other public service corporations. The approximate character of the estimates for certain items, on the other hand, with the error probably on the side of underestimation, has been indicated, particularly in the case of real estate mortgages. There is also probably more omission than duplication. The method itself of enumeration of parts to be included is of a character to lead to an underestimate.

With reference to determining the proportions of the different kinds of property owned by citizens of the United States, some allowance should be made for the ownership of American securities abroad. But making allowance on the other side for foreign securities owned in this country, the amount owned abroad must be much less than formerly. It must now be considerably less than the "not much over \$2,000,000,000" estimated for the beginning of the century. (See Bacon, *Yale Rev.*, IX, p. 277.)

As regards the tendency towards paper property, there can be no doubt. The newness of some of the items in the above review, the comparative youth of practically all of them, the character of the lines where the most striking recent developments of the commerce and industry of the country have occurred, all these facts point unmistakably to the conclusion that paper property in the United States has been gaining very rapidly of late, quite as rapidly as in any other country.

Despite the fact that our chief exports are still the products of the farm, and thus are produced under the individual entrepreneur system, chiefly by cultivators who are owners of the soil, and despite the fact that our people are not, on the whole, avidious of abstract, or paper, property, the United States, though it may still be consid-

erably behind Great Britain as regards the proportion of its wealth covered by paper, has probably no less a proportion than France, whose people are distinctly partial to paper property. The per cent. of abstract property is of course greater than that of paper property. The per cent. of either to the productive wealth of the country is greater than to the total national wealth.

CHAPTER III.

RECENT ECONOMIC CONDITIONS AND TENDENCIES IN PRODUCTION AND EXCHANGE AS RELATED TO THE GROWTH OF LARGE FORTUNES.

§ 1. *General View of Large-scale Production and of Incremental Income.*

In the light of the superior fitness of producers' goods in general as material for riches, and of the comparative suitability of particular forms for concentration into large fortunes, we may now consider concrete conditions in the various fields of the growth of capital-values.¹ The development of abstract property has been shown to be a pre-condition to the evolution of great fortunes such as we know them. Now in two general ways shall we find recent economic history effective directly and positively to create such agglomeration of private property.

Some sorts of concrete wealth are of such a nature that if they are to be directly of benefit to their owner, which involves their being administered by him, the owner must be rich. Of such a nature are most of the instruments of machine production. Modern machines are usually so powerful or so delicately adjusted, and their accessories are so numerous or so expensive, that a well-equipped manufacturing plant embodies a fortune. The fact of a

¹The four modern progressive nations—France, England, Germany and the United States, each representative in its way—furnish the appropriate material for studying present economic tendencies in production, exchange, and distribution. Hence little attempt is made to use statistics of countries other than these.

tendency to large-scale production in manufactures is familiar. As a result of this tendency manufacturing enterprises must be not only larger but relatively fewer in number. Individual entrepreneurs must therefore be richer than under conditions of small-scale or handicraft production. There is another way to secure centralization and unified control, that is, through corporate ownership, but then the proprietor's interest becomes abstract property. Either directly, or through its relation to abstract property, large-scale production favors large fortunes.

The value of a good may increase and the increase may accrue to its owner without effort on his part and without any change occurring in the good. A plot of land may receive increased value simply through growth of population and of demand. Unforeseen circumstances may likewise increase the value of a merchant's stock on hand and double his profits. Gain accruing in this way is not so good a type of income from property as the fruits yielded by the tree or the crops produced by the soil. It can be more clearly seen to be income from property, solely, however, since the grain must be sowed and the harvest garnered by human labor. Labor and land are thus joint claimants and competitors in the assignment of shares in the proceeds of the harvest. In the case of an increase in value due to changes in conditions with the progress of time, however, there is no difficulty about the line of division between the reward of labor and the contribution of capital, for there is no such line to be drawn. All is mere value-increase, not at all purposed or produced by man. There are no concrete fruits. Income from wealth may therefore be divided into value-incremental and goods-fruitional income. We may call the former incremental income.

The important typical case of incremental income is the case of the value-increase of land, which exemplifies the principle that value, in contrast with utility, is due to "nature's power over man".² Such value-increase is not due to better conditions of living, though it may be a symptom of that, owing to implied ability to pay. At any rate, it is not service to society that enables some to profit by such increase of demand. The same may be said of speculative gains in any line. They are all incremental income. The fact that there may as well be value-decrease as value-increase, or that prices fluctuate, does not mean that we are to measure the speculator's opportunity for incremental gains by a final difference in value, allowing intermediate fluctuations to cancel out. The limit of possible gain for the speculator is rather the total of upward price movements, since his aim is to sell only at the highest points and to buy at the low.

Incremental income is obviously in essentials abstract-property income. If it were only typical income, it might be typical abstract-property income. But it is in its nature irregular and little predictable or reliable. It requires no administrative care, but it is not regularly

² The relation of value to utility is a difficult subject, and not least so in the case of value-increase or incremental income. Utility appears to remain the same in the case of such an increase of value. This proposition, however, cannot be accepted without qualification. The reason for the accretion of value may be the discovery of new uses for the good. Or, by increase of population, there may be new users and new utilities created with them—assuming that, since the intensity of utility for each user will be about the same, abstract utility is in proportion to the number of users. The assumption involved would doubtless be acceptable to most, though to the writer it seems that utility, as abstract capacity to satisfy wants, should be independent of the number of consumers. The utility of a *supply* of a particular good is a different thing from the abstract utility of the good as such.

recurrent. It is therefore receipts rather than income; rather to be considered an addition to one's principal than available for application to current and recurrent needs. It has not therefore less but more relation to the acquisition of riches. The difference between acquisition and production is nowhere more important than in relation to spontaneous increase of value.

The business man, of whom we hear so much nowadays, is the man who studies and knows markets. The profitableness of his enterprises is always more or less due to the keenness of his sense for incremental income. To multiply his profits it is only necessary that more goods, all goods, be brought to market and valued in terms of the market, or in money, and not valued so once only, but valued and re-valued in a succession of exchanges. But this is just what has been happening in the last two or three generations. The development of the technique of transportation has extended all markets and magnified many times the scale of market transactions. Formerly isolated and outlying communities and countries, from Ceylon to the edge of the one-time "great American desert", have been drawn into the swirl of exchange and suffer or prosper according to the level of prices determined in world markets. The cultivator of the soil has steadily become more and more specialized and less and less self-sufficient, more and more dependent on a price for his products of whose determining conditions he knows next to nothing. The local dealer is sometimes no better informed. The dealer in the great commercial centers is the one who knows best how to profit by conditions. He is perhaps also able sometimes to manipulate the market to his advantage. The opportunity of the business man in any line to profit by value-increase is multiplied by the increase in the breadth and

in the number of exchanges. Recent economic evolution has thus greatly added to his power and importance.

With the further development of money and credit institutions, conditions become more and more favorable to the shrewd possessor of a knowledge of prices and price-tendencies.⁸ Prices are affected by the extent of business confidence and the elasticity of credit as well as by demand for and supply of goods and by quantity of money. The business man, but especially the banker, is most often able to profit by such changes.

Commercial shrewdness, whether it be that of the exceptionally knowing speculator or of the business man who has mastered a particular line of production and sale, is rare and gathers great incremental gains. And every business man speculates on occasion, probably the more successfully if he is not a speculator by instinct and habit, or not completely such. Even very slight changes in price, under modern conditions of a world-wide market and an unprecedented scale of individual transactions, may mean enormous gain or loss. The commercial function of the entrepreneur has inevitably become more and more important, not only for his own gain but also for the adaptation of production to the needs of society. Hence the dominance of the business man. All along the line the man with foresight and self-restraint, who keeps his own counsel, and is shrewd enough to get the better side of a bargain, is the man that counts. Money-value or price is his specialty. Material adjustments he leaves to the engineer, and administrative organization he

⁸ "Commodities, those economic goods which are the real objects of human desire, apparently occupy a secondary place in the business world, for in the conscious purposes and desires of men money is the primary thing. For this and other reasons . . . 'price' and 'profit' are the two most important words in the lexicon of political economy." J. F. Johnson, *Money and Currency*, p. 10.

is more and more likely to leave to the hired manager.

The two points above reviewed, large-scale production and incremental income, are in a measure themselves bound together as different aspects of the same development. Adam Smith says that division of labor is limited by the extent of the market. Division of labor is an aspect of co-operation of laborers and such co-operation both is facilitated by and itself favors large-scale production. But the size of the establishment, and thus the profitable degree of specialization within it, are limited by the extent of the market. Production on a large scale is possible only where the market is made large either by density of population or by cheap transportation. The extension of large markets, however, and the inclusiveness of the application of the market measure of things, that is, money, involve a greater importance of mere price and of the man who deals in and knows prices. Thus large-scale production and the increasing importance of markets, of money, of credit, and of the business man, and hence of incremental gains, go together.

These two thoughts are the chief clews to the argument of the present chapter. Here they have been mentioned briefly and in the abstract. In the concrete their influence, with that of the associated development of abstract property, is felt in a multiplicity of forms and combinations. We shall attempt to trace these influences, with a view to their effects upon acquisition and distribution, in their operation in relation to changes in landed property, rural and urban; in the rapidly developed exploitation at home and abroad of natural resources, mineral and other; in the perfecting of material instruments and of business organization for large-scale manufacture and transportation; in commerce, especially in the commerce of "money" and securities; incidentally, in the

reaction of governmental policies upon economic conditions; and, pervading all these, in a powerfully dynamic character of the present age of economic transition. Finally we must gauge the facts relating to the acquisition and distribution of property in the light of changes and conditions as regards the rate of interest, and in view of the presence in this economic ferment of the germs of future modification in the distribution of abstract property, and hence of property as a whole.

§ 2. *Landed Property.*

The economic basis of feudal inequality and the oldest material of large fortunes, was income-yielding agricultural land. The concentration of the ownership of land in England and in eastern Germany is a survival from the feudal organization of society, just as the small size of landed properties in France is largely a result of the crash of feudalism in the Revolution. The United States has always been a land of the middle-class proprietor-cultivator. The English landed aristocracy or the Prussian *Junkertum* have no counterpart here. Attempts to transplant the "English gentleman", with his landed estate cultivated by tenants, never were successful, owing doubtless to the unbounded supply of free land. The planter aristocracy of the South was not typical, and, as an economic institution, has never recovered from the abolition of slavery. Experiments with large-scale wheat-growing in the prairie regions—heralded as the beginning of large-scale production in agriculture—have not satisfied expectations.

The question as to whether middling holdings, or middling entrepreneur incomes, are more than maintaining their position in agriculture is in various ways highly significant. For the general question the experience of

the United States is less decisive than that of European countries, because this is a new country with a history of unexampled agricultural expansion. But it is fast becoming no longer new. Except for being without the surviving results of a feudal past, it is approximating to European conditions. Under such circumstances a slight tendency to a less proportion of independent middling farmers in the United States may be, not a symptom of causes at work producing the decline of this class, but merely the readjustment following a period extraordinarily favorable to it.

In 1899 Mr. G. K. Holmes said:^{3a} "It has been established by a thorough statistical analysis that, in the more recent years, the increase in number of farms has more largely accrued to farms of medium size than to farms of the smaller and larger sizes." And, "The middle-class farmer, according to the tendency disclosed by the Census of 1890, is coming more to the front among agriculturists." The Census of 1900 indicates a reversal of the previous tendency. Except in the Southern States, and of course for the United States as a whole, there was, in the last decade of the nineteenth century, an increase in the proportion of farms of 500 acres and over. The proportion of farms under 50 acres increased in all sections. The proportion of farms 100 or more but not so much as 500 acres in extent *decreased in all sections*. Farms of 50 to 100 acres increased in proportion in the South Atlantic, South Central, and Western Divisions, and decreased in proportion in the North Atlantic and North Central Divisions, and also in the United States as a whole.⁴ To determine just what in detail is

^{3a} Year Book of the Department of Agriculture, p. 323.

⁴ NUMBER OF FARMS OF SPECIFIED AREA IN ACRES, with increased or decreased proportion indicated by plus or minus sign (absolute numbers from the 12th Census, vol. V, p. xlv).

the meaning of these statistics is for our purposes unnecessary. The tendency exhibited is not gratifying. Neither need it be occasion for pessimistic feeling as regards the future of the American agriculturist.

The tendency to an increased proportion of tenants is too marked to be lightly passed over, but it may be merely another sign of the end of agricultural expansion. It is most marked in the South. The percentages for the

1890	All sizes.	Under 50 acres.	50 to 100 acres.	100 to 500 acres.	500 acres and over.
United States	4,564,641	1,318,521	1,121,485	2,008,694	115,941
Same, per cent. distribution	100	28.9	24.6	44.0	2.5
North Atlantic	658,569	204,675	195,364	254,510	4,020
Same, per cent. distribution	100	31.9	29.7	38.6	0.6
Western	145,878	28,117	14,800	87,672	15,289
Per cent. distribution	100	19.3	10.1	60.1	10.5
North Central	1,923,822	385,764	526,935	983,218	27,905
Per cent.	100	20.0	27.4	51.1	1.5
South Atlantic	749,630	291,979	151,889	275,966	29,796
Per cent.	100	39.0	20.2	36.8	4.0
South Central	1,086,772	407,986	232,497	407,328	38,961
Per cent.	100	37.5	21.4	37.5	3.6

1900.

United States, Continental	5,737,372	1,931,366	1,366,038	2,290,282	149,686
Per cent.	100	+ 33.7	- 23.8	- 39.9	+ 2.6
North Atlantic	677,506	221,318	191,730	259,362	5,096
Per cent.	100	+ 32.6	- 28.3	- 38.3	+ 0.3
Western	242,908	71,662	28,370	116,587	26,289
Per cent.	100	+ 29.5	+ 11.7	- 48.0	+ 10.8
North Central	2,196,567	488,850	562,891	1,091,511	53,315
Per cent.	100	+ 22.3	- 25.6	- 49.7	+ 2.4
South Atlantic	962,225	412,788	216,522	309,831	23,084
Per cent.	100	+ 42.9	+ 22.5	- 32.2	- 2.4
South Central	1,658,166	736,748	366,525	512,991	41,902
Per cent.	100	+ 44.5	+ 22.1	- 30.9	- 2.5

United States, according to the status of the cultivator, were:⁴

	Owners.	Cash Tenants.	Share Tenants.
Year 1900.....	64.7	13.1	22.2
" 1890.....	71.6	10.0	18.4
" 1880.....	74.5	8.0	17.5

Outside the Southern States, 75 to 80 per cent. of owners letting farms reside in the same county with the rented farm.⁵ There thus appears no tendency to absenteeism. Neither is there any tendency in this country to the growth of a landed gentry. Rented farms are largely such by reason of lapse to a mortgagee, and the difficulty of finding a purchaser. Others are rented by owners who have gone into some other business and are awaiting a purchaser. Others are the summer homes of city-dwellers.

England and Prussia are the countries in which the tradition of a landed aristocracy retains its greatest vigor, hence statistics relating to tendencies in large rural estates for these countries are especially significant. The statistics show that in both these countries there is a decided tendency towards middling holdings of agricultural land at the expense both of very small holdings and of large estates.⁶ It does not necessarily follow that, because large

⁴ 12th Census, vol. V, p. lxxvii.

⁵ 12th Census, vol. V, p. lxxxvii.

⁶ The German census yields the following data relating to the size of *Landwirtschaftsbetriebe* in 1882 and 1895. (Table, giving also absolute numbers, in Conrad I, p. 133.)

PER CENT. DISTRIBUTION OF AGRICULTURAL SURFACE BY
SIZE OF HOLDING.

Size in Hectares.	German Empire.		Prussia.	
	1882.	1895.	1882.	1895.
Under 2	5.73	5.56	4.94	4.91
2 to 5.....	10.01	10.11	7.71	7.84
5 to 20.....	28.74	29.90	22.91	24.30
20 to 100.....	31.09	30.35	32.76	32.01
100 and more.....	24.43	24.08	31.68	30.94

estates are being divided for purposes of cultivation, their ownership is also being divided, but the two tendencies are associated in Prussia and probably elsewhere. Even if the tendency is merely toward middling tenant holdings, that means a tendency toward middling entrepre-

Farms from 2 to 20 hectares in extent, that is, from about 5 to 50 acres, possessed 38.75 per cent. of the cultivated area of the German Empire in 1882, and 40.01 per cent. of the same in 1895, while the smaller and the larger holdings show losses. The middling holding in Germany would of course be smaller than in America, because of the higher value of land. In the seven eastern provinces of Prussia, the region of large proprietors, there was an absolute as well as a relative loss for large-scale agricultural production.

German manufacturing statistics are classified in the same manner, and of course exhibit the opposite tendency, that is, towards *Grossbetrieb*.

For Prussia there are also statistics relating to the tendency as regards size of *properties* in land. (Conrad IV, p. 852.)

PER CENT. DISTRIBUTION OF PROPERTY IN LAND.

	No. of Properties.		Cultivable area.	
	1878.	1893.	1878.	1893.
Grossgrundbesitz	2.1	2.0	38	38
Mittlerer Besitz	11.7	10.9	29	29
Kleinbesitz	17.3	19.4	19	21
Unselbständiger Besitz.	69.	68.	13	12

These classes (large, middling, small, etc.) are based upon net produce as calculated for purposes of taxation.

British agricultural statistics for 1895 give data for holdings below 5 acres, but those for 1885 do not, hence the comparison must be for holdings above 5 acres in extent. (Returns of Agricultural Holdings in Great Britain, pp. 6-7.)

AGRICULTURAL HOLDINGS CLASSIFIED BY SIZE.

Size in acres.	1885.		1895.	
	Number.	Per cent.	Number.	Per cent.
5-20	148,806	37.52	149,818	37.26
20-50	84,149	21.22	85,663	21.30
50-100	64,715	16.32	66,625	16.57
100-300	79,573	20.06	81,245	20.20
300-500	13,875	3.50	13,568	3.37
500-1000	4,826	1.21	4,616	1.15
Over 1000	663	0.17	603	0.15
	396,607	100.	402,138	100.

neur incomes. According to the situation as regards the ownership of personalty, one is inclined to suspect that the rich, despite the tradition of a landed aristocracy, are drawing out of the ownership of agricultural realty, finding abstract property more convenient. Agriculture is the great field of the small entrepreneur and will so remain.

The doubtful point is, how far the cultivator will be full owner. How far is he to become a mere tenant with

ACREAGE OF AGRICULTURAL HOLDINGS.

	1885.		1895.	
	Acres (thous.)	Per cent.	Acres (thous.)	Per cent.
5-20.....	1,657	5.15	1,668	5.18
20-50.....	2,825	8.78	2,865	8.89
50-100.....	4,747	14.76	4,885	15.16
100-300.....	13,658	42.47	13,876	43.08
300-500.....	5,241	16.30	5,114	15.88
500-1000.....	3,147	9.79	3,001	9.32
Over 1000...	883	2.75	802	2.49
	32,157	100.	32,211	100.

Farms from 5 to 300 acres in extent showed a gain in acreage in the 10-year period, while large holdings declined relatively and absolutely, both in number and in acreage. It is significant that the 5 to 20 acre class showed a decline in relative numbers, but a gain in relative acreage, which means a higher average holding within this class, that is, a tendency towards the middling holding. Although there was a gain in the total acreage for Great Britain, and a greater gain in the number of farms, there was a decline both in number and in acreage for all classes of holdings over 300 acres.

The 1895 statistics distinguish and classify by size holdings rented and owned, respectively, by their occupiers. But later returns, for comparison to detect the tendency, are not yet available.

Readjustments required by the decline of the value of agricultural land in Europe, resulting from the importation of breadstuffs, should cause a substitution of larger in place of middling holdings for field culture. The growth of cities, on the other hand, should increase the number of small holdings for garden culture. Hence it would not be surprising if the tendency as regards the size of holdings were the reverse of what it is and against intermediate holdings.

only a small working capital of his own? How far will he be the owner of a marginal investment in land mortgaged as much as it will bear? The extent of farm mortgage indebtedness appears to have increased between 1890 and 1900 in the United States.⁷ It is hardly to be expected that the American farmer will flourish at quite such a rate now that the frontier is a thing of the past. The tendency to a rapid gain in tenancy shown for the decade from 1890 to 1900 is not gratifying.

The expansion of the white race by actual migration into great new agricultural regions, and by trade relations with less industrial peoples, has meant an enormous growth of the importation of breadstuffs into Europe and a depreciation of agricultural land-values there. At the other end of the balance, however, has been the pioneer on new land maintained by the European market. At this end, above all, is prominent the American farmer.⁸ The shift in land-values, down in Europe, up in the American prairie, has doubtless meant, on the whole, a tendency to a democratization of the ownership of agricultural land. This is true, even apart from the known tendency to a splitting up of large estates in Europe.

Urban and rural realty values exhibit sharply contrasted tendencies. The rapidly increasing density of the population of the occidental world, and the growth of cities at a rate which in many places, even in the United States, means rural depopulation, has brought with it

⁷ Cf. percentages in the footnote below at p. 86. Statistics of the tendency as regards the *amount* of indebtedness are not obtainable.

⁸ But the demand for necessities is inelastic. The extension of cultivation has increased much faster than population. New agricultural land has probably not gained as much in value as the old has lost. Between the years 1878-81 and 1884, and again between 1884 and 1887, though the total *quantity* produced increased, the *total value* of the world's supply of grain fell off. (Juraschek, *Uebersichten der Weltwirtschaft*, p. 172.)

an enormous growth of urban land values. Recent city growth in the United States is not so exceptional as we are likely to think. It is not merely due to the growth of industries in a new country. The growth of American cities can be matched by the growth of those of Germany.⁹

While it is not possible entirely to separate the value of buildings and improvements from that of the mere land, there is good ground for suspecting that, on the whole, buildings and improvements form no less a portion of the total value of the real estate employed in American agriculture than of urban real estate. Someone has recently argued that the rental of agricultural land in England, since the decline in agricultural values of the last thirty years, is no longer more than enough to pay a very low rate of interest on what has been expended in, and is now represented by, permanent improvements. Certainly many a fertile farm in New York State can be

⁹ This comparison is effectively made by Shaw, *Municipal Govt. in Continental Europe*, pp. 292-6.

The population of England and Wales, as subdivided into Urban and Rural Districts, was as follows (Census, 1901, Summary Tables, p. 44):

	In 1891.	Per cent.	In 1901.	Per cent.
Total	29,002,525		32,527,843	
Urban	21,745,286	75	25,058,355	77
Rural	7,257,239	25	7,469,488	23

The proportion of city population is increasing even in a country where the tendency to urbanization has long been pronounced. The "point of saturation" is still moving up.

Weber (*Growth of Cities*, p. 1) makes the following comparison:

	U. S. in 1790.	7 Colo. of Aus- tralia, 1891.
Population	3,929,214	3,809,895
Pop. in cities 10,000 or more	123,551	1,263,283
Proportion living in cities..	3.14%	33.20%

The difference is the difference between a century ago and now. The per cent. of the population of the U. S. in places of 8000 or more was 29.2 in 1890 and 33.1 in 1900.

bought for less than would be the cost of reproduction of its buildings, even where these have been recently constructed. If this condition is due to the decline of agricultural land-values, something like it must be generally true for central Europe and for the eastern part of the United States. There has been, on the other hand, a pronounced tendency to a rapid rise in land values in the cities, with which the value of buildings can hardly have kept up. Aside from these dynamic factors, the due proportion of the value of improvements to the value of land would seem to be smaller when the value of the land is larger.^{9*} Hence it is fair to assume that the results of a comparison of tendencies in the values of urban and rural real estate hold also, for present purposes, for mere land values.

In fifty years the value of Berlin realty multiplied itself 150 times.¹⁰ Figures for New York City are less startling, but comparable in character, the multiple being 12 for forty years.¹¹ The reason for the smallness of the multiple is doubtless the fact that the growth of the realty value of the city as an economic entity has been so largely the growth of realty values in some half-dozen counties around Manhattan Island. The value of agricultural land and accessories in 1860 in Great Britain was scarcely less than that of "houses" with accessory

^{9*} "As population increases the value of land increases more rapidly than the value of improvements." N. Y. City Tax Com. Rpt. of June, 1907, p. 8.

¹⁰ The total value of land and buildings in Berlin increased from 1842 to 1892 from 395 to 5967 million marks. It is now, according to Blenck's calculation, as high as the land-value of the four provinces of E. and W. Prussia, Pomerania, and Posen. (Schmoller, p. 641.)

¹¹ The Census of 1850 (Compendium, p. 189) puts the value of N. Y. City realty at \$227,015,855. The Census of 1890 (Valuation and Taxation, p. 40) states the value of N. Y. City real estate at \$2,627,153,845. The figure for Greater New York for 1904 is \$6,141,004,093 (Wealth, Debt and Taxation, 1907, p. 111).

land. Forty years later the value of "houses" was over 4 times as great as that of "land".¹² But the rapid growth of an urban and industrial population in the United States has been in every way more remarkable since 1860 than in England.

Speculation in real estate has naturally been one of the most prolific sources of large fortunes everywhere, and not least in the United States.¹³ The "unearned incre-

¹² The tendency to a rapid growth of city real estate values was felt in London at the very beginning of the nineteenth century. From returns of the rental of the city of London it appears that in the thirty years from 1771 to 1801 the annual value of houses increased 10.85 per cent., while in the first thirty years of the nineteenth century the increase was 56.27 per cent. (Porter, III, p. 139.) Compare the annual values of "houses" and "lands" for Great Britain at various dates in the income-tax schedules:

	Land (in mil. pounds)	Houses (mil. pounds)
1860.....	49	53
1884-5.....	55	125
1901-2.....	43	180
1903-4.....	43	197

Income from land used for building purposes is included with "houses". (The figure for 1860 is from Schmoller, p. 64., which I have not been able to trace to its source. The other figures are from the U. K. Statistical Abstract.) Giffen (p. 111) gives the following table showing the relative importance of "land" as a form of wealth through two centuries:

	Land.		Houses.	
	Amt. (mil. pds.)	Per cent. of total	Amount	Per cent. of total
England.				
1690 (Greg. King).....	180	60	45	15
1800 (Beeke)	600	40	180	15
United Kingdom.				
1812 (Colquhoun)	1200	44	400	15
1865.....	1864	30	1031	17
1875.....	2007	24	1420	17
1885.....	1691	17	1927	19

There has been a relative decline in the value of agricultural realty from 60 per cent. to less than 20 per cent. of the total wealth.

¹³ See note at end of this chapter.

ment" is that of city real estate. In farm values there has been an "unearned" decrease extending even into the Middle West. The growth of cities has, through real estate speculation and incremental income, made many of our millionaires.

As regards ownership of city real estate, with reference to degree of concentration, it is significant that in the United States mere "homes", that is, on the whole, city homes, are two-thirds of them rented, while "farm-homes" are two-thirds owned. In New York City in 1900 hired homes were 87.9 per cent.¹⁴ It is less likely that an owner of property in the city will have put his first accumulations into a home than it is that the countryman will have done so with his. Opportunity for industrial employment may change its place and cause an uprooting of the city-dweller, while the farm-home provides the owner with his occupation. But this probably affects comparatively little the above degree of difference. The tendency to renting homes favors the growth of abstract property, which, again, is favorable to concentration. The long-term lease of city ground for building purposes, for ninety-nine years, for example—agricultural land is not rented so—clearly exhibits the abstract-property spirit and tendency of city land.

¹⁴ The Census percentages (Vol. II, p. cxcii) are:

	Owued	Hired
1900—Farm homes	64.4	35.6
Other homes	36.3	63.7
1890—Farm homes	65.9	34.1
Other homes	36.9	63.1

For Manhattan and Bronx Boroughs the proportion of hired homes is 94.1 per cent. (p. ccvi). In Berlin in 1900, of 22,717 inhabited lots, only 1776 were inhabited in part or wholly by owners; that is, 94 per cent. of city lots contained structures exclusively for renting with owners living elsewhere. (1900 Grundstück u. Wohnungsaufnahme, p. 11.)

The growth of cities is significant for this study, not only for its effects, but also because of its symptomatic character. It signifies, in the first place, a shift in human occupations away from agriculture and into manufactures and commerce. This is partly due to a further local as well as personal segregation of the crafts from agriculture in order to mechanize them. It is probably more due to a greater development of the refining processes through which raw materials are passed. The weight of these occupations is not thrown into the scale of economic democracy.

But city growth is related to tendencies not only in production, but also in distribution and consumption. The differentiation of the abstract-property owner from the administrator of productive wealth permits geographical segregation of the former. This means that he will seek certain favored places of abode, chiefly cities, especially capital cities.¹⁵ New York City, or its neighborhood, and Washington,¹⁶ are thus favored in the United States. But many Americans find Paris, or some other European resort, more congenial. The recent growth of the "villa" population of the Riviera is significant of corresponding tendencies in Europe. In the cities, too, of course the rich have their own quarters or suburbs.

¹⁵ Compare the following remarkable passages in Hume, remembering that his "stock-holders" are government bond-holders, the then representatives of the abstract-property owning class: "National debts cause a mighty confluence of people and riches to the capital" (p. 364). "These [stockholders] are men . . . who can enjoy their revenue in any part of the globe in which they chuse to reside, who will naturally bury themselves in the capital or in great cities, and who will sink into the lethargy of a stupid and pampered luxury, without spirit, ambition, or enjoyment" (p. 367).

¹⁶ The proportion of the millionaires in Washington who are women, and thus presumably not active in the administration of productive wealth, is noticeably large. See list in *World Almanac*.

The political and social effects of such absenteeism are of much importance. But we are here concerned with it only as a symptom of the growth of riches.

The presence of the rich in the cities helps to drive up land values. The provision of public utilities and the support of institutions for amusement and education add to the attractiveness of city life and intensify the tendency to concentration of population. It is chiefly ability to pay on the part of the rich that makes the best of these things possible. The growth of the great city, moreover, adds to the material for riches by creating needs of transportation and of other forms of public service which are the basis of enormous capitalization of street and steam railway enterprises and the like.

The contemporaneous growth of large fortunes and of large cities in the United States is not a mere coincidence. The growth of a city proletariat is reciprocally cause and consequence of industrial and commercial organization on a large scale. Thus a cause of inequality is working within cities. Both for business and for pleasure, on the other hand, the cities offer special attractions to the rich outside, as well as producing probably more than their share from their own population. The number of very rich men who have been attracted to New York from outside is symptomatic of a general tendency. The growth of cities means thus a growth of large fortunes, of which it is both cause and consequence.¹⁷

¹⁷ Evidence of the difference between city and country as regards wealth and its distribution follows:

Cities, owing largely to greater real estate values, have more per capita wealth than rural districts. (Cf. Map No. 1 in 11th Census Rpt. on Valuation and Taxation. Densely populated, along with new and nearly unoccupied regions—this last doubtless being due to the speculative factor—show the highest per capita value of real estate. The great agricultural regions show moderate or low per capita values. Cf. the data for New York below). This is a reason

The much greater growth in the value of city real estate as compared with that of rural, that is, mainly agricultural, land, gives the latter much less weight in

why we should expect absolutely larger fortunes. But it does not account for comparative degrees of *concentration* of property in city and country.

A comparison of the probate statistics of Suffolk County, including the capital and chief city of the state, with those for the rest of Massachusetts shows the greater number and weight of the rich in the former. (The data are from the 1894 Report of the Massachusetts Bureau of Statistics of Labor.)

MASSACHUSETTS PROBATE STATISTICS.

	Population (12th Census, vol. I, p. 24).			Number of estates above \$100,000.	Ratio of same to popu- lation (large ests. in 3 yrs. per 100,000).
1829-31.					
Suffolk Co.	62,163	....	.....	6	9.6
Rest of State.....	548,245	....	.....	5	.9
1859-61.					
Suffolk Co.	192,700	....	.....	40	20.8
Rest of State.....	1,038,366	....	.....	46	4.4
1879-81.					
Suffolk Co.	387,927	....	.....	93	24.0
Rest of State.....	1,395,158	....	.....	116	8.3
1889-91.					
Suffolk Co.	484,780	....	.....	113	23.3
Rest of State.....	1,754,163	....	.....	131	7.5
		Size of median estate.	50 times the median.	No. estates above 50 x median.	Ratio of same to population.
1829-31.					
Suffolk Co.	\$1029	\$51,450	14	22.5	
Rest of State.....	925	46,250	22	4.2	
1859-61.					
Suffolk Co.	2178	108,900	37	19.2	
Rest of State	1748	87,400	58	5.6	
1879-81.					
Suffolk Co.	2806	140,300	69	17.8	
Rest of State.....	2136	106,800	112	8.0	
1889-91.					
Suffolk Co.	2664	133,200	89	18.4	
Rest of State.....	2323	116,150	115	6.6	

the total of wealth. The growth of fortunes based on urban realty has thus much more than outweighed the increased number of proprietor-cultivators, together with

The first part of the table is given for rough comparison without regard to the requirements of correct method. But in the second part, though the form of tabulation is analogous, a thoroughly relative test for concentration is used. The method of calculation assumes a geometrical distribution of cases between class limits and is simply a reversal of the processes indicated in footnote 5 of chapter II. The differences exhibited as regards concentration of property are striking enough to overbear any sort of objection.

A similar comparison of Baltimore with the rest of Maryland shows the same sort of difference. The data are from the 3rd and 4th Annual Rept. of the state's Bureau of Industrial Statistics. Population is estimated by simple arithmetical interpolation.

MARYLAND PROBATE STATISTICS.

	Population			Number of estates above \$100,000.	Ratio of same to popu- lation (large ests. in 3 yrs. per 100,000).
Baltimore City...	316,073	....	.....	64 (6 yrs.)	10.1
1875-1880 incl..	(Dec., 1877)				
Rest of Maryland	575,903	....	.....	10 (5 yrs.)	1.0
1875-79 incl....	(June, 1877)				
Baltimore City...	471,698	....	.....	89 (6 yrs.)	9.4
1888-93 incl....	(Dec., 1890)				
Rest of Maryland	622,178	....	.....	16 (5 yrs.)	1.5
1890-94 incl....	(June, 1892)				
	Size of median estate	50 times the median	No. of es- tates above 50 x median.	Ratio of same to popu- lation.	
Baltimore City, 1875-80.....	\$1947	\$97,350	66	10.4	
Rest of Maryland, 1875-79...	903	45,150	39	4.1	
Baltimore City, 1888-93.....	1541	77,050	126	13.4	
Rest of Maryland, 1890-94...	725	36,250	50	4.9	

It should be noted that the above are not comparisons of accurately defined and separated urban and rural populations, but merely of more thoroughly urban with a partly rural or less urban population. There is no basis for an inference as to the *degree* of difference between city and country in respect of concentration, unless it be that the difference is much greater than appears.

the tendency, now reversed in the United States, to a relative gain for middling holdings in agriculture. But

A qualification is necessary as regards these probate figures. If small properties are in effect less than reported, by reason of indebtedness, the situation is not so favorable for the country as appears. But this affects only the degree of apparent difference. There is, on the other hand, a large amount of evasion of city taxes on the part of the rich by acquiring a legal residence where taxes are low. There is also the undervaluation of personalty in large estates.

Statistics permitting an analogous comparison for the state of New York follow. Not only the distribution of estates by size, but the proportions of personalty and realty in the different classes of estates, is given, since it is highly significant for our study of causes. The period covered by the statistics is the three months ending with, and inclusive of, December, 1892, selected because during them there was no great estate admitted to probate in New York City. Page references are to Spahr, *Present Distribution of Wealth*, under whose direction the statistics were compiled.

DISTRIBUTION OF PROPERTY IN ESTATES.

New York City (p. 56).

Estates.	No.	Per cent.	Aggregate value.	Per cent.
\$50,000 and over.....	53	5	\$12,437,511	75
\$50,000 to \$5,000.....	212	22	3,538,313	21
Under \$5,000	704	73	590,172	4
<hr/>				
Totals	969		\$16,565,996	
<hr/>				
Per cent. division within the classes.				
Realty.	Per cent.	Personalty.	Per cent.	Realty. Personalty.
\$4,471,900	72	\$7,965,611	77	36 64
1,660,833	27	1,867,480	18	47 53
40,967	1	549,205	5	7 93
<hr/>		<hr/>		
\$6,173,700		\$10,382,896		

Kings County (Brooklyn),
considered fairly representative of the large cities
of the country (p. 62, footnote).

Estates.	No.	Per cent.	Aggregate value.	Per cent.
\$50,000 and over.....	27	5	\$6,973,100	73
\$50,000 to \$5,000.....	147	29	2,099,330	22
Under \$5,000	336	66	512,030	5
Totals	510		\$9,584,460	

there is more to be said of the prospects of the propertied middle class in agriculture. Aside from the symptom of increase of tenancy in the United States, there is a differ-

Realty.	Per cent.	Personalty.	Per cent.	Per cent. within classes.	
				Realty.	Personalty.
\$2,872,100	71	\$4,101,000	74	41	59
1,029,250	26	1,070,080	19	49	51
135,330	3	376,700	7	26	74
<hr/>		<hr/>		<hr/>	
\$5,036,680		\$5,547,780			

The State Outside New York and Brooklyn (p. 64).

Estates.	No.	Per cent.	Aggregate value.		Per cent.
\$50,000 and over.....	36	2	\$8,794,663		55
\$50,000 to \$50,000.....	409	22	5,184,196		22
Under \$5,000	1427	76	2,085,098		13
<hr/>		<hr/>		<hr/>	
Totals		1872	\$16,063,957		
Realty.	Per cent.	Personalty.	Per cent.	Per cent. within classes.	
				Realty.	Personalty.
\$2,188,540	36	\$6,061,123	67	25	75
2,950,325	48	2,233,871	22	57	43
989,668	16	1,095,430	11	47	53
<hr/>		<hr/>		<hr/>	
\$6,128,533		\$9,935,424			

Madison, Herkimer, Wyoming, Chenango and Schoharie Counties, which are typically agricultural (p. 63).

Estates.	No.	Per cent.	Aggregate value.		Per cent.
\$50,000 and over.....	3	2	\$251,000		19
\$50,000 to \$5,000.....	60	28	623,163		19
Under \$5,000	149	70	465,258		35
<hr/>		<hr/>		<hr/>	
		212	\$1,339,421		
Realty.	Per cent.	Personalty.	Per cent.	Per cent. within classes.	
				Realty.	Personalty.
\$56,000	9	\$195,000	28	22	78
334,475	53	288,688	41	54	46
243,525	40	221,733	31	52	48
<hr/>		<hr/>		<hr/>	
\$634,000		\$705,421			

A relative test for these figures may perhaps be omitted, for present purposes, since it would affect only the degree of difference between city and country, not its direction. Indeed, its use in this

ence between ownership and ownership. It is important to know what has been the tendency as regards the mortgaging of farms. We should, *a priori*, expect an in-

comparison, on the basis of such statistics as the above, is exposed to the objection that much of the income and property of city residents is derived from concrete capital to be found in the country, as, for example, in the case of mortgages on country real estate, or in the case of securities of railway corporations whose trackage is in the country. The local concentration of large holdings of personalty, doubtless mostly paper property, in cities is very much in evidence. It is noticeable, on the other hand, how little the small property-holders are able to acquire realty in such a large city as New York.

New York's transfer tax is an inheritance tax whose burden falls on the well-to-do and the rich. After making allowance for differences in per capita wealth, there is no reason why receipts from it should vary significantly in different parts of the state except for the unequal local distribution of the rich. The data compiled in the following table were obtained from the Reports of the Comptroller of the state, for the five fiscal years 1902 to 1906 inclusive. Per capita value of real property and improvements in 1900 (exclusive of railroads, street railways, telegraph and telephone systems, privately owned water-works, and privately owned electric light and power stations), as calculated from data in the 1907 Report on Wealth, Debt, and Taxation, p. 69, are added as an indication of the allowance to be made for differences in per capita wealth. The per capita values of the tax receipts and of realty are calculated for groups of counties as follows:

Kings, New York, Queens, Richmond, grouped as Greater New York, 100 per cent. urban; Albany, Broome, Chemung, Erie, Fulton, Monroe, Niagara, Oneida, Onondaga, Rensselaer, Schenectady, Westchester, grouped together as having 50 per cent. or more, but not 100 per cent. of their population in incorporated places of 8000 or more inhabitants in 1900; Cattaraugus, Cayuga, Chautauqua, Clinton, Columbia, Cortland, Dutchess, Genesee, Herkimer, Jefferson, Montgomery, Ontario, Orange, Oswego, St. Lawrence, Saratoga, Steuben, Tompkins, Ulster, Warren, grouped together as having some, but not 50 per cent., of their population urban, as defined above; Allegheny, Chenango, Delaware, Essex, Franklin, Greene, Hamilton, Lewis, Livingston, Madison, Nassau, Orleans, Otsego, Putnam, Rockland, Schoharie, Schuyler, Seneca, Suffolk, Sullivan, Tioga, Washington, Wayne, Wyoming, Yates, grouped together as having no urban population.

crease, for not only have institutions of credit and the practice of undertaking every kind of business with borrowed capital grown up from nothing since the mid-

GROSS RECEIPTS FROM THE TRANSFER TAX IN NEW YORK AS DISTRIBUTED BY COUNTIES GROUPED ACCORDING TO URBANISM.

Groups.	Population in 1900.	Per capita val. of real prop. and imprvmts. in 1900.	Transfer tax received for five years 1902-1906.	Receipts per capita in the five years.
Greater New York (4 counties)	3,437,202	\$1,507	\$16,148,598	\$4.70
12 counties half or more urban	1,712,467	827	4,676,803	2.73
20 counties less than half urban	1,239,458	651	1,992,674	1.61
25 counties without urban population ..	879,767	633	1,678,994	1.91
Totals	7,268,894	\$1,097	\$24,497,060	\$3.37

The artificiality of the grouping in the above table reduces the apparent difference between city and country. Of the receipts from the second group Westchester county affords \$2,001,957, or not far from one-half. The third group is most nearly homogeneous, with Dutchess, Orange, and Saratoga counties having the largest receipts. In the fourth class, Nassau accounts for \$544,454, and Suffolk for \$248,065, of the receipts, while no other county in the group affords as much as \$100,000. The counties outside the metropolis with most riches are such by overflow from the great city, not by native growth.

Census figures showing much greater proportion of renting of homes in city than in country have been referred to in another connection (p. 75).

Prussian income-tax data are arranged in such a way as to bring out the fact of local concentration of large incomes in the cities. In Prussia in 1903 incomes of 100,000 marks or more formed 0.09 per cent. of cases of taxation in cities, and 0.03 per cent. in the rest of the kingdom. The percentages of income-tax payers to population is larger in the cities. The contributions from this class of incomes were 15.50 per cent. for the cities and 11.66 per cent. for the rest of the state. (Centennial Vols. of the Prussian Bureau of Statistics, Pt. II, p. 127.)

The tendency to the disproportionate presence in cities of the possessors of the largest incomes is rather an indication than a measure of their detachment from the places where the incomes are

dle ages, but there has been a tendency to a change from the personal to the impersonal in credit as in other relations. Real estate is the most acceptable basis for long-term borrowing. The same tendencies which favor the growth of abstract-property income in other fields are

produced. It is of course possible that they may choose to reside elsewhere than in cities. They are likely to have both city and country homes, and, in America at any rate, would be likely to maintain *legal* residences in the latter. In Prussia there are working against city residence the traditions of feudalism and *Junkertum*.

The more thoroughgoing the detachment from nature, the higher the minimum money income must of necessity be, and this doubtless affects the size of smaller incomes in cities and their proportion of the total. In the diagrams of the Prussian Statistical Atlas (Centennial Vols., Pt. III, Tables 98 and 99), the fact of generally higher money incomes from labor in cities is evident, though the very large incomes, that is, mainly from property, are even more prominent. In Berlin, the large proportion of incomes between 900 and 1200 marks, that is, lying just within the scope of the income tax, is especially noticeable.

The suggestion of local concentration of abstract property is supported by such figures as are obtainable relating to the place of ownership of securities. Any evidence of such concentration not in the locality of the concrete wealth corresponding to it, or evidence of dispersion away from that point, is itself testimony to the abstractness of the property.

The distribution, as it was in 1880, of one large block of abstract property among the different states of the United States, and as between city and country, is known. As compiled by the Census of 1880, of \$417,538,850 of registered U. S. bonds held by private individuals, the following amounts were held in the states specified (10th Census, Vol. VII, Valuation, Taxation, and Public Indebtedness, p. 494). Percentages of this total owned in certain states, their population, and percentages of their population to that of the U. S. are added for purposes of comparison.

State.	Amt. of bonds.	Per cent.	Population 1880.	Per cent.
Massachusetts	\$45,138,750	10.8	1,783,085	3.5
New York	210,264,250	50.4	5,082,871	10.1
Distrist of Columbia...	12,419,050	3.0	177,624	0.4

Of \$321,749,050 in bonds held by private individuals in 117 cities the following was the distribution among certain cities (p. 495-7):

also affecting the income from agricultural land.¹⁸ Perhaps an important reason why the forces at work to produce concentration of ownership in other lines are in general not operative in agriculture is because the land mortgage serves the purposes of the rich better than the ownership of large estates.¹⁹ On the side of the mortgagor, too, familiarity with credit forms should be ex-

Boston	\$19,958,950
New York City.....	176,724,550
Philadelphia	26,457,450
Baltimore	6,130,200
Washington	12,084,650
Chicago	5,953,600
San Francisco	10,312,450

Many of the holdings on which payments were made in New York were doubtless owned abroad, but this does not appreciably affect the importance of the evidence for local detachment and urban concentration of abstract property.

Stocks and bonds of corporations are believed to be owned chiefly in the big cities of the East. The following quotation is illustrative of the business man's opinion: "Wall street cuts no such figure in the eye of the Middle West as it does to the communities on the Atlantic seaboard. The crash in prices and the violent fluctuation of stocks attract slight attention. For one thing the West has so few stocks that it is not directly interested. It could sell all it owns of Eastern shares and create little excitement in Wall Street." (*N. Y. Evening Post*, Mar. 10, 1906.)

That the larger incomes are more to be found in cities, and that the cities also contain a larger proportion of large fortunes, may be considered proved.

"Improvements in the method of mortgaging, by registers, etc., in connection with the removal of former feudalistic hindrances, have brought it about that "in Western Europe from 1700 to 1900 the indebtedness of landed property very generally increased from a small per cent. (wenige) up to half the value and over." Schmoller,

"I have been unable to find . . . that capitalists are seeking investments in farms, except in so far as they lend money to farmers on farm mortgage securities. The lenders do not want the farms." Mr. Geo. K. Holmes in a letter printed in *Emerick*, *Pol. Sci. Quar.*, IX, pp. 619-20. The statement would probably be agreed to by all in a position to know.

pected to increase the tendency to purchase on a small margin by a class that, under former social and economic conditions, would have become tenants. And the spirit of enterprise which is characteristic of the American farmer might be expected to promote the borrowing of money for improvements. High farm values should mean more difficulty in paying off the mortgages already incurred, and increase their proportion to the value of farms. Rising values should, of course, have the opposite effect, but might be outweighed by introducing the influence of high and speculative values, where farms change hands frequently. Such general factors have probably been at work in the United States in a way to increase the amount of farm mortgages for the country as a whole since the attempt of the Census Office to ascertain their amount in 1890. According to the enumeration of 1900, though we have no data for amounts of mortgages, there has been an increase in the proportion of farms mortgaged.²⁰

²⁰ The percentage distribution is:

	Ownership of Homes Known.	
	Free.	Encumbered.
1900—Farm homes	68.9	31.1
Other homes	68.0	32.0
1890—Farm homes	71.8	28.2
Other homes	72.3	27.7

From 12th Census, vol. II, p. excii. It is natural to assume that the same conditions which cause an increase in the *extent* of mortgage indebtedness will increase its proportion to the total value of such property. Prussia apparently affords the most recent and accurate information on the subject of the real estate mortgage. Schmoller (p. 647) summarizes the situation as follows: "In 1893 the finance minister estimated the sum of Prussian mortgages (Hypoteken und Pfandbriefe) in city and country at 16.5 billion marks. Eberstadt gives the increase of hypothecary indebtedness in Prussia from 1886 to 1897 for the cities as 8.5 and for the country as 2.4 billions. For all Germany the same author calculates the mortgage indebtedness in city and country at 42 billion marks. If the total value of

If thus, through the growth of the abstract-property interest in land, the agricultural entrepreneur tends to become less a man of means, the position is, other things being equal, more accessible. Perhaps it is the abstract-property arrangement which will prevent the growth of permanent tenancy in the United States.²¹ Tradition and social prestige do not in the United States, as they do in England, weigh in the scale against economic reasons and favor large estates and tenancy. Great country estates of the rich in America are chiefly pleasure parks. But the prospect of mortgaged farms has its disadvantages. Such a situation is not favorable to land amelioration. The farmer's margin, in such a case, is too much like the speculator's margin. But the mortgage prospect is the worst situation at all likely, and not what is especially to be expected. Conditions are more favorable to the continuance of a propertied middle class of owners of agricultural land than for a corresponding wealth-administering urban middle class.

History has worked great changes in "landed interest". Rural landlords, who once controlled the state, have not only lost their dominant position in political affairs, but are losing ground absolutely and literally. The richest peers and greatest landed proprietors of England owe their primacy to the fact that they own so much of the ground of London. Our great landlord family, the Astors, have made a specialty of investment in *city* real estate. Common speech in the United States

wealth in Germany is about 200, and that of land and buildings about 100, billion marks, the result is that, of the realty, the owner disposes of 58 per cent., and the creditor 42 per cent. The situation is similar in many lands." Percentages of indebtedness to land value for the districts of Prussia in detail, but not for the total, are given in the Centennial Volumes of the Prussian Statistical Bureau, II, pp. 130-135.

²¹ Emerick's conclusion, p. 620, is the same, with this implied as one reason.

has even ceased to recognize the distinctive calling of the possessor of large rural estates worked by tenant cultivators. The word "landlord" brings to our minds images either of the owner of city tenements or of the hotel-keeper. And the "landlady" is a boarding- and lodging-house keeper!

The freeholder and cultivator of land has always been the mainstay of American democracy. We need not greatly fear the extinction of this class, nor even its decline, as regards absolute numbers. But the owner of city land has been gaining greatly in importance, here as elsewhere, since the middle of the last century, and the owner of agricultural land has relatively been declining. The growth of cities, which is also symptomatic of industrial and social tendencies toward inequality, has not only in process been the means of making many rich through value-increase of real estate, but, as an accomplished fact, it is the basis of a new landlord class, in effect possessors of abstract property, who are certainly richer in the total, whose richest are doubtless far richer, and who are more numerous, than the feudal landlords of a former age.

§ 3. *Mineral Resources.*

The rapid exploitation of natural resources has been increasingly prominent in the last century throughout the world, but most of all in the United States. The extension of the cultivation of land has been one phase of this, but not so remarkable as the development of mineral resources. Intermediate in their nature between these two are lumber and grazing, both notable for the quota they have contributed to the number of American millionaires.²² But the tendencies exhibited in lumbering

²² See note at end of chapter.

and cattle-raising are similar to those in mines and minerals, where the rate and kind of exploitation are best observed.

The extraction and utilization of minerals has made enormous strides, intensively throughout the world by technical improvements, and extensively by bringing into the market the products of the mines of new countries. Such enterprises, when important, are almost without exception carried out on a large scale, and by corporations. They also exhibit a tendency to monopoly, observable, for example, in American coal, iron, and copper. They thus afford appropriate food for the growth of large fortunes.²³ Not only so, but the production of some of the minerals, especially iron and coal, is an index of the growth of large-scale power-driven machine production and of capitalism in all lines. It is matter of common knowledge how recent is the mineral development of the United States, but figures for other countries also astonish by their magnitude.

It is calculated that the world's production of iron in 1800 was 825 thousand metric tons. In 1898 it was 36,159 thousand metric tons. The increase has multiplied the amount 45 times in less than a century.²⁴ But the United States has outstripped all others in this development, having passed the United Kingdom in the production of iron and steel in 1890, and being now far in the lead. Of iron ore it produces more than any other three countries. It produces 37 per cent. of the world's

²³ Incorporated companies account for 86.3 per cent. of the value of the product of mines and quarries (1902 Census Special Report on Mines and Quarries, p. 66). In manufactures the corresponding proportion in 1900 was two-thirds. The average value of product for these corporations is somewhat less in mining than in manufacturing, but probably not enough less to account for the contribution of the value of raw materials to the value of manufactures.

²⁴ For a detailed table see Juraschek, in Conrad III, p. 475.

iron and steel, while the United Kingdom and Germany together produce only about 40 per cent.²⁵

In the production of coal recent developments are not less startling. In 1800 the production of the world was 12 million metric tons; in 1897 it was 650 million metric tons.²⁶ There has been an increase to 54 times the amount at the beginning of the century. The coal production of 1904 was close to 900 million metric tons.²⁷ As with iron, the production of coal has been increasing at an accelerating rate. Again the United States exhibits the characteristic tendency in its highest degree. Although its production had scarcely begun in 1830, it has recently, in 1899, passed the United Kingdom, and now produces nearly half as much again as that country. Its prospects, as tested by area of coal fields, make the comparison even more favorable.²⁸

The utilization of mineral oil began only in the middle of the nineteenth century, since which time production has increased enormously. Two countries enjoy almost a monopoly of this product. The United States lost the leadership to Russia in 1898, but regained it in 1902, and has gone ahead at such a rate that in 1904 it produced almost half as much again as Russia.²⁹

The United States also leads the world by far in the production of copper. In fact it produces more than all the rest of the world put together, and more than seven times the product of any other country.³⁰ This line of production has developed from almost nothing since the

²⁵ The Mineral Industry during 1904, pp. 253-4.

²⁶ For details see Juraschek in Conrad II, p. 562b, etc.

²⁷ The Mineral Industry, p. 96.

²⁸ See table in Chisholm, *Commercial Geog.*, 4th ed., p. 174. It appears that the United States and China are in a class by themselves, each with nearly twenty times the area of the coal-fields of any European country except Russia.

²⁹ The Mineral Industry, p. 353.

³⁰ *Ibid.*, p. 122.

seventies. The production of copper, too, in this "age of electricity", has an importance and a symptomatic value in relation to industry next to that of iron and coal.

The United States also leads in the production of aluminum, borax, salt, quicksilver,⁸¹ phosphate, and lead. In zinc, Germany alone is a little ahead of us. In silver Mexico barely leads the United States. In gold, South Africa, the United States, and Australia are close competitors for first place.

This great development of mineral industries in the United States has been as recent and rapid as otherwise noteworthy. In the words of a recent foreign observer: "Not only does the United States far outrank other countries, but its supremacy in this particular sphere of activity is constantly becoming more pronounced."⁸² Remarkable as has been the growth in other lines, the mineral industries lead all others in rapidity of development.⁸³ The total value of our mineral output unmanu-

⁸¹ List so far from Gannett, *Statistical Abstract of the World*, 1907, p. 22ff.

⁸² Pierre Leroy-Beaulieu, p. 222.

⁸³ In the Report of the Industrial Commission (vol. XIX, Appendix I) are diagrams showing the increasing volume of production in the various lines in the United States. These data are used as the basis of the following comparisons for the beginning and end of the thirty-year period 1870 to 1900. Where the period, as indicated is different, the ratio has been calculated as if the same *rate* of increase had been maintained for the longer period. Population and its increase are added for comparison.

RELATIVE VOLUME OF PRODUCTION IN THE UNITED STATES IN 1900,
taking the datum of 1870 as 100.

Gold	159
Silver	455
Pig iron	833
Copper	2150
Petroleum	1156
Bituminous coal (from 1880).....	509
Anthracite coal (from 1880).....	189

factured in 1902 was 797 million dollars. As late as 1870 it was only 191 millions.³⁴ Of the product of mineral industries the value in 1904 is estimated at one and a half billion dollars.³⁵

Not only has the United States produced the minerals, but it has produced the "oil magnates", the "coal barons",

Cotton	225
Wheat	221
Corn	198
Wool	181
Sheep (from 1875).....	126
Swine (from 1875).....	137
Cattle (from 1875).....	168
Milch cows (from 1875).....	148
Horses (from 1875).....	140
Iron and steel rails (to 1899).....	417
Crude steel (to 1899).....	13850
Cotton mills (takings).....	321
Woolen mills (takings, to 1899).....	187
Cigars and cigarettes (to 1899).....	643
Distilled liquors (to 1899).....	197
Fermented liquors (to 1899).....	537
Railroad miles operated (1871 to 1899)....	418
Ton miles (1882 to 1899).....	322
Passenger miles (1882 to 1899).....	143
Value of exports and imports.....	192
Tonnage, U. S. merchant marine.....	129
Population	198

To state in general terms the facts expressed by the above ratios, the products of agriculture have increased barely as fast as population, while the products of manufactures have increased perhaps twice as fast as population, and those of mines, on the whole, at a still greater rate. Internal transportation appears to make about the showing of manufactures, while interests in the mercantile marine and in foreign trade have not gained at a rate in proportion to population.

³⁴ Mines and Quarries, p. 6.

³⁵ Mineral Industry, p. 1.

the "copper kings", and the "steel kings".⁸⁶ As with the "unearned increment" of city land, our mineral resources have been conspicuously prolific producers of millionaires. These "unearned" increments have not been altogether unearned, for the pioneer in the discovery and development of natural resources deserves a large reward. The beneficiaries of the development in the United States, however, have been chiefly great and monopolistic corporations. These corporations are owned by the rich, who have thus been made rich or richer.

§ 4. *Foreign Investments.*

The exploitation of tropical and other colonies is to be mentioned as a phase of the exploitation of natural resources. But in the United States, which has only recently embarked in schemes of "colonization", it is far less important than elsewhere. The fringe of this development, coming within our commercial relations as it does, has affected us somewhat, but only in a minor degree as compared with the exploitation of our home domain. Some large American fortunes were made by pioneers in the oriental and tropical trade. John Hancock's fortune was made in the West Indian trade, which was also the foundation of the fortune of Stephen Girard.

A phase of such international economic relations is public and private loans abroad. Lending capital abroad began with public debts, and was of small importance at the beginning of the nineteenth century. With the growth of the corporate form of organization of transport and industrial enterprise, and with the organization of stock exchanges and of international banking—the creditor or capitalist being thus enabled to live where he

⁸⁶ See note at end of chapter.

will—foreign investments in such enterprises have greatly increased in magnitude.

At one time the British national debt was largely owned abroad, though more because of unsettled conditions on the Continent than because of superfluity of capital. Now the United Kingdom is the great creditor nation, with an income from foreign investments far greater than the income from its "lands". Giffen's estimate for 1886 was 85,318,000 pounds sterling for interest on such securities.³⁷ This estimate is based on the 1885 income-tax returns, where the corresponding items amount to 34,763,000 pounds.³⁸ The items of income from foreign securities reported in the income-tax schedule for 1902-3 amounted to 62,559,479 pounds,³⁹ which is of course less than all income from foreign investments. There may have been improvements in methods of assessment such that a larger portion of this sort of income is now reached. But it appears that income from foreign securities, which was already in 1885 greater than the income from the lands of the United Kingdom, may have increased as much as three-fourths in less than twenty years, while the income from lands has declined.

France is only recently a competitor of England, but appears to be taking from her the lead as the great source of new funds. The French are known to be the chief holders of the enormous Russian debt. French bankers are now regarded as the great source of free "capital".⁴⁰

Germany is also a considerable holder of foreign stocks.

³⁷ G. of C., p. 161.

³⁸ *Ibid.*, 11 and 27.

³⁹ Com. of Inland Rev., p. 202.

⁴⁰ "Last year has surely threshed out the predominance of French gold in the world's money market." *N. Y. Evening Post*, Financial Section, Feb. 25, 1906.

The United States is still, on the whole, doubtless a great debtor nation, though it has recently been paying off some of its debts and even making some foreign investments. The field of investment opportunity at home has been so great and so rapidly expanding that only lately have our accumulators begun fully to occupy it. That they are catching up at such a rate now, while we are still pushing ahead our home enterprises, is evidence of great accumulations.

The riches of England, France, and Germany are greatly increased by investments abroad. More recently those of the United States have been thus somewhat increased.

§ 5. *Manufactures and Large-scale Production.*

The Industrial Revolution in England began in the last quarter of the eighteenth century, primarily as a result of a series of inventions relating to manufactures. In other countries, among them the United States, these changes did not begin to be noticeable until the nineteenth century. If the beginning of the Industrial Revolution is indefinite, the end is more so, for as yet it is not. There has probably been more improvement in technical processes in the last quarter-century than in the whole period before. These changes have strengthened and advanced capitalism and the factory system. In the United States, especially, the growth of manufactures, although this is still for the most part a new country, has been such that it threatens to take the lead away from agriculture, if it has not already done so. For 1790 Tench Coxe estimated the annual value of manufactured products in this country at about \$50,000,000.⁴¹ In 1890 the value of

⁴¹ By rather crude methods he estimates the value of domestic manufactures in 1790 at \$20,000,000. (View of the United States,

products was reported by the Census at \$9,372,000,000; and in 1900 at \$13,000,000,000, or 260 times as much as 110 years before. It is not necessary that these figures be accurate and perfectly comparable to be convincing; but for manufactures that are "factory product" it is probable that they understate the development. Pierre Leroy-Beaulieu prophesies that we will shortly surpass England in the manufacture of cottons and France in the manufacture of silks.⁴¹ The same foreign student of our industrial development says it is "certain that the United States is to-day and by far the first industrial power in the world, just as it is the first agricultural power, and it does not seem too much to say that its industrial strength, as expressed by the value of the output, has increased by five-fold from 1860, while that of Germany has only doubled, that of Great Britain has increased by but one-half, and that of France shows a still smaller increase."⁴²

As regards the present comparative rank of agriculture and manufactures in the United States, official opinions themselves are conflicting. Considering the question from the point of view of value of net product after deducting cost of raw materials and the like, the Twelfth Census's Chief Statistician for Manufactures says:⁴³ "On this basis, it appears that the contribution of manufactures and the mechanical arts to the wealth of the country exceeds the contribution of agriculture by more p. 262.) At another place (p. 430) he says the value of manufactures is much greater than, but by implication not double, the gross value of all imports. Perhaps \$50,000,000 would be about what he had in mind.

⁴¹ U. S. in 20th Cent., p. xiv.

⁴² Pierre Leroy-Beaulieu, p. 162. Just beyond (pp. 165-6) he mentions the qualification that the industrial population of Great Britain is still absolutely larger than that of the United States.

⁴³ Vol. VII, p. liv.

than a billion dollars." The Chief Statistician for Agriculture, on the other hand, reaches the conclusion:⁴⁴ "Judged by investment, agriculture still leads manufactures by a wide margin." He also more than implies⁴⁵ that, in point of power employed, agriculture uses more animal power than manufactures do mechanical power. Comparing the United States with other countries, the Chief Statistician for Manufactures is of the opinion⁴⁶ that we have already for some time been the leading manufacturing country in the world. Though there was room for dispute in 1900, we may conclude from the known trend of events, and from the facts exhibited by the 1905 Census of Manufactures that, judging by material and market measures, manufacturing has now attained supremacy. Perhaps we should judge rather by the number and quality of men employed in the different occupations.

Rates of development and changes in the importance of various occupations and industries in the United States are perhaps best measured by counting heads. We shall therefore use statistics of persons occupied in the different kinds of production to test their comparative importance at various times. Between 1870 and 1900, on this basis, agriculture made an absolute gain of over two-thirds, but manufactures grew more than twice as rapidly, and trade and transportation three times as fast. All groups of occupations gained greatly in relative importance at the expense of agriculture. In 1870 agriculture employed about as many persons as all other groups together; in 1900 only about three-fifths as many. On going further back, the change becomes still more re-

⁴⁴ Vol. V, p. xxv.

⁴⁵ Vol. V, p. cxxxv.

⁴⁶ Vol. VII, p. lv.

markable. Sixty years ago, that is in 1840, it appears that all other occupations together employed not much more than one-fourth as many persons as agriculture alone. The United States was then a thoroughly agricultural country.⁴⁷

⁴⁷ Taking agricultural pursuits as the fixed point in our ratios, we find, for every 1000 persons occupied in agriculture at the given dates, the following numbers occupied in the other great classes of gainful occupations (Occupations, pp. I-III) :

	1900	1890	1880	1870
Agricultural pursuits	1000	1000	1000	1000
Professional service	121	110	78	62
Domestic and personal service.....	538	493	443	381
Trade and transportation	459	388	242	209
Manufacturing and mechanical pursuits..	683	663	491	450

The numbers occupied in agriculture increased in the following ratios:

1870.....	1000	1890.....	1440
1880.....	1297	1900.....	1745

It is perhaps a fairer basis for comparing the importance of great classes of occupations to count only males in gainful pursuits. It is of little importance, for our purpose, whether the labor of women is unpaid auxiliary labor or is paid on a commercial basis. It would be desirable to eliminate all children from the comparison, for similar reasons, but it appears to be impossible for 1870, and their small number makes the elimination of little importance. The ratios for males are:

	1900	1890	1880	1870
Agricultural pursuits	1000	1000	1000	1000
Professional service	88	80	60	50
Domestic and personal service.....	371	324	314	233
Trade and transportation.....	453	392	254	220
Manufacturing and mechanical pursuits..	614	590	443	419

The number of males in agriculture increased in the following ratios:

1870.....	1000	1890.....	1421
1880.....	1283	1900.....	1694

The decade of the Civil War was a period of prosperity for manufactures but of retarded agricultural expansion. Carrying back such occupation figures further would not weaken the impression made.

In 1840, according to Tucker's contemporary estimate, based on census returns, ratios corresponding to those above were:

The tendency toward large-scale production and toward the corporate form of organization is increasingly dominant in these manufacturing enterprises.⁴⁸ The domi-

Agriculture	1000	
The learned professions.....	17	
Commerce	31	
Navigating the ocean.....	15	
Internal navigation	9	
Sum of above three.....		55
Manufactures	209	
Mining	4	
Sum of above two.....		213

These figures may not be exactly comparable with those previously quoted, but, allowing for a wide margin of error, it is clear that this was almost exclusively an agricultural country sixty years ago. Tucker's figures as given are as follows (Progress of the United States, p. 142), being reduced in the above:

Total number employed in agriculture....	1 out of	45
Ditto manufactures	"	21.5
" commerce	"	145.
" the learned professions.....	"	261.
" navigating the ocean.....	"	304.
" internal navigation	"	516.
" mining	"	1122.

For comparison with the above mode of expressing the same facts, following is the per cent. distribution of the number of persons, 10 years of age and over, engaged in gainful occupations, 1880, 1890, and 1900 (12th Census, vol. VII, p. liv):

	1900	1890	1880
All occupations	100.	100.	100.
Agricultural pursuits	35.7	37.7	44.3
Professional service	4.3	4.1	3.5
Domestic and personal service.....	19.2	18.6	19.7
Trade and transportation.....	16.4	14.6	10.7
Manufacturing and mechanical pursuits.....	24.4	25.0	21.8
Fishing	0.2	0.3	0.3
Mining and quarrying.....	2.0	1.7	1.4
Manufacturing and mechanical pursuits proper.	22.2	23.0	20.1

⁴⁸ The comparative size of manufacturing establishments, as tested by average annual value of products, in 1905 (Bul. 57, p. 14), by form of organization was:

nance of both these tendencies is strikingly brought home to us in recent Census figures. If we may accept the figures for 1900 as adjusted in the Census of 1905 as entirely comparable with the later figures, out of the 94 most important specified industries, selected as employing 5000 or

Incorporated company	213,310
Firm	44,482
Individual	14,943

Such an average of course conceals the much larger actual size of the dominating concerns. The tendency to an increase in the relative importance of corporations in manufactures, before noticed, is a datum to be associated with the above. As illustrating the tendency toward concentration into large establishments, the 12th Census (vol. VII, p. lxxii) gives the data for which ratios are calculated in the following:

SIXTEEN INDUSTRIES ILLUSTRATING CONCENTRATION.

	Average number of wage- earners per establishment.		
	1850	1900	Per cent 1900 of 1850 figure
Agricultural implements	5	65	1300
Boots and shoes, factory product (earliest date 1880, so that ratio assumes same rate of increase for the fifty yrs.)		89	390
Carpets and rugs, other than rag.....	53	214	404
Cotton goods	84	287	342
Glass	60	149	248
Hosiery and knit goods.....	27	91	337
Iron and steel.....	53	333	628
Leather, tanned, curried and finished....	4	40	1000
Liquors, malt	5	26	520
Paper and wood pulp.....	15	65	433
Shipbuilding	14	42	300
Silk and silk goods.....	26	135	519
Slaughtering and meat-packing.....	18	61	339
Tobacco, chewing, smoking and snuff....	30	67	223
Woolen goods	25	67	268
Worsted goods (only 3 establishments in 1850, but the 1900 average is the highest of a regularly progressing series except for 1850)	793	306	37

For data for intervening dates see the original table. This relates not at all to combination of plants. For data relating to the *Betriebsstatistik* of Germany see Lexis in Conrad, IV, circa 791.

more wage-earners in 1900, 37 showed an absolutely smaller number of establishments at the later date than five years earlier and in one other line the number remained the same. This condition was not due to a decline in the industries themselves, for only 2 of the 38 employed fewer wage-earners at the later date.⁴⁹ They shared the great prosperity of manufactures in general, but the tendency toward large-scale production was strong enough to overbear in one-third of our important industries the stimulus prosperity imparts to increase the number of enterprises. Incorporated companies, though they were only 23.6 per cent. of the number of establishments in 1905, had 82.8 per cent. of the capital reported, and employed 70.6 per cent. of the wage-earners.⁵⁰ This is the industrial side of what we saw in the previous chapter in another aspect as the rapid increase of corporate securities. The increase in the number of salaried officials, clerks, etc., of manufacturing concerns, 42.7 per cent. in five years, while wage-earners increased only 16.0 per cent., is also evidence of the extension of the corporate form of organization.⁵¹

For testing the rate of development of the factory system and of machine production we have also an index in the use of power. The increase of aggregate motive power employed in manufactures according to Census figures,⁵² from 1890 to 1900, was 74.8 per cent. In the five years from 1900 to 1905 the increase was 39.0 per cent. For the decade from 1880 to 1890 the increase was 74.6 per cent.; for 1870 to 1880 it was 45.4 per cent. The importance of power is thus increasing at an accelerating rate, and much faster than manufacturing itself.

⁴⁹ The data are from Bul. 57, Table 84, p. 76ff.

⁵⁰ Bul. 57, p. 14.

⁵¹ Bul. 57, p. 9. Cf. also footnote below at pp. 137-9.

⁵² Bul. 57, p. 53.

It is not necessary to prove that in a manufacturing population there prevails great inequality of wealth. Such a development was clearly foreseen. The following words of Franklin are prophetic: "Great establishments of manufacture require great numbers of poor to do the work for small wages; these poor are to be found in Europe, but will not be found in America, till the lands are all taken up and cultivated, and the excess of people, who cannot get land, want employment."⁵³ DeToqueville has an acute chapter, entitled "How an Aristocracy may be created by Manufactures,"⁵⁴ in which he correctly analyzes certain consequences of division of labor and machine production, and concludes: "If ever a permanent inequality of conditions and aristocracy again penetrate into the world, it may be predicted that this [manufacturing] is the gate by which they will enter."⁵⁵ Jefferson, before this, had expressed his belief that the United States would retain a republican form of government so long as it should remain a nation of agriculturalists, but otherwise was doubtful. It is not an accident that Alexander Hamilton, who was *not* a republican, was the great protagonist of manufacturing development, seeing in the labor of women and children a feasible escape from the obstacle of high wages.⁵⁶

⁵³ Writings (Smyth's edition), VIII, p. 611.

⁵⁴ II, p. 193.

⁵⁵ The entire summing-up passage is both more grating and more reassuring: "I am of opinion, upon the whole, that the manufacturing aristocracy which is growing up under our eyes is one of the harshest which ever existed in the world; but at the same time it is one of the most confined and least dangerous. Nevertheless, the friends of democracy should keep their eyes anxiously fixed in this direction; for if ever a permanent inequality of condition and aristocracy again penetrate into the world, it may be predicted that this is the gate by which they will enter." II, p. 197.

⁵⁶ See his Report on Manufactures, in several places.

Small-scale production, with direct ownership and administration of the capital employed, maintains a middle class of entrepreneurs.⁵⁷ Large-scale production destroys this class, ⁵⁸ greatly increases the amount of capital required in the industry, adopts the corporate form of organization, and nourishes economic inequality with abstract property.⁵⁹ On the side of income from labor, too, large-scale production, involving as it must the more or less regimental organization of industry, gives to the decisions and directions of men with commercial knowledge and organizing skill, that is, the "captains of industry", a greatly enhanced importance and value. Acting with such a group in such a way increases the power of own-production in a way to increase inequality. But this is as nothing in comparison with the influence of large-scale production in depressing a middle class owning concrete means of production, and in furnishing soil and material for large fortunes.

Not only by increasing the amount of capital and especially of abstract-property rights to income does large-scale production favor the growth of fortunes, but in degree as well as in amount the development of an abstract-property character is facilitated. Certain corpora-

⁵⁷ The Carnegie Steel Company was, until recently, a partnership, on principle, as the Baldwin Locomotive Works still are. But such exceptions presuppose not only great fortunes, but the continuance of its creators in the business.

⁵⁸ This is the evil in what is, on the whole, a greater good, that is, the increased productiveness of labor. But the evil is not therefore less great, and if separable, as it is, from the good, it presents problems which we are bound to seek to solve.

⁵⁹ The confusing of concentration of ownership with aggregation of productive capital by almost all the contributors to the *Independent's* (May 1, 1902) symposium on "concentration of wealth" is presumptive evidence of connection between the two. Prof. Sumner, with no thought of abstract property and its possibilities, explicitly associates them (p. 1037).

tions, especially railroads, have acquired such assured financial standing as to make their bonds almost as good as "governments". Industrial combinations have also issued bonds, which, however, have not as yet acquired such standing. But the larger the concern, the less a fluctuating personnel determines its valuation. On the side of the investor, too, the multiplicity of stocks and bonds in the market makes possible virtual insurance—thus producing a further development of an abstract-property characteristic through the division and balancing of risks. The larger the fortune so invested the better this can be done. It may be affirmed, as a general proposition, that the wishes of the inactive capitalist have had about as much to do with corporate evolution as the technical requirements of production. The dominance of the corporation in business is not more the dominance of capital in the concrete sense, than it is the dominance of the differentiated capitalist and of abstract property, over the personal or human factor in production.⁶⁰

§ 6. *Commercial Advantages of Large-Scale Business, including Combination.*

The corporation is at an advantage in interesting the capitalist or investor.⁶¹ This facility in getting capital, which results from the appetite for abstract property, tempts to undue multiplication of shares.⁶² In times of rapid accumulation and of confidence the investing public can "digest" almost anything. The mere prestige of size

⁶⁰ The flat-footed statement of Van der Borcht (Conr. I, 185a) is: "Die Form der Aktiengesellschaft da geeignet ist, wo das Kapital in den Vordergrund tritt, und da nicht geeignet, wo die Unternehmerarbeit von entscheidender Bedeutung ist." The increase of corporations is thus evidence that capital is more and more dominant.

⁶¹ *Ibid.*, 183a.

⁶² *Ibid.*, 183b, 187b.

is a factor in making a favorable impression. Stocks are the most suitable material for speculation, and are often issued for such purposes. What else could be the outcome of the "financial law that stock-watering increases values"?⁶³

Such commercial advantages of large-scale production, in dealing with the lender as well as the buyer, count for much. Industrial combination is effected very largely with a view to the stock market.⁶⁴ For the rest, advantages in selling products—aside from the possibility of some degree of monopolistic influence on prices—are most noticeable among the advantages of industrial combinations.⁶⁵

Integration or vertical combination is clearly a process of reducing the mercantile element and its risk. Industry is nearer to commerce than is agriculture, for there is buying and selling at both beginning and end of its processes; and in proportion as market dealings intervene between the various stages of manufacture, the mercantile factor is more prominent. Combination offers the advantage of bringing the merchant under control of the industry—or do the merchant and the financier control the industry as masters within it?—by eliminating his intervention between the subdivided processes of production, and even by including the intermediary between producer and consumer within the industrial concern itself. The internal organization of the factors of production calls for different qualities from those which secure the commercial success of an enterprise. In com-

⁶³ Greene, *Corp. Fin.*, p. 140.

⁶⁴ Cf. Professor Meade's judgment, *Trust Fin.*, p. 176 and elsewhere.

⁶⁵ Cf. Jenks, *Trust Problem*, ch. II; also Bullock in Ripley, *Trusts, Pools, and Corps.*, pp. 450ff.

bination the two powers are invincible except from within by suicidal arrogance.

The technical advantages of large-scale *production*, in the narrower sense of the term, affect the size of the *plant*, but do not produce the combination of many plants or establishments. Even as regards the size of the plant, the technical factor from the commercial side, as cost of transportation, is perhaps the most important clew to "increasing returns". Adam Smith's proposition, to the effect that industrial development is limited by the extent of the market, has not been altogether improved by attempts to formulate a "law of increasing returns". How much modern instruments of transportation mean for the "extent of the market" is a commonplace. The commercial advantages of large-scale enterprise are most directly supported by technical advantages in the case of retail trade in large cities.

The commercial advantages of large-scale business and combination work both ways in favoring large fortunes, that is, by reaction in sustaining and helping to carry on further the tendency, on account of technical advantages, to aggregation of productive wealth under the management of fewer and fewer men, and also positively, by furnishing material to the stock market and by arming those whom it makes its agents with unprecedented control of wealth and of conditions of business, and with some degree of monopoly power over prices. The effects are noticeable in the commerce of capital. The importance of New York banks and bankers in movements of combination is, much to their profit, very conspicuous.

§ 7. *Dynamic Conditions in Industry.*

Ever since the Industrial Revolution the field of investment has, both intensively and extensively, been growing

larger and larger. This is another aspect of the great increase of capital. It means also large opportunities for the pioneer entrepreneurs who see where some new venture may be undertaken with prospect of unusual profit. Ours is a dynamic era. The unprecedentedly rapid growth of capital is the great symptom. The paying of higher wages because of decreasing labor cost, the labor being more and more effective through improved appliances, is another phase of the same thing.

Ever since the Industrial Revolution there has been a tendency to a falling cost of production and to a corresponding fall in prices. But prices of products do not fall so promptly as cost of production, and their tardier fall gives the gain, in the first instance, to the entrepreneur. The consumer and laborer come in for their share later, meanwhile often leaving a very great margin of profit to the entrepreneur, which he gives up only gradually, as forced to by competition. Or monopolistic devices may sometimes enable him to retain it indefinitely. Thus great advances in production are favorable to the acquisition of riches. This applies especially to new methods and degrees of exploitation of natural resources. There has been no period in the world's history when there has been a technical and economic development at all comparable to the most recent advances. We have above given some of the statistical evidence. Developments in transportation and in many branches of manufacture have been as striking as those in mineral industries. The Industrial Revolution is a thing of the past only in the sense that rapidity of technical improvement has become chronic and is reckoned with. It is no longer revolutionary; it is ordinary.

The fall in cost of production has been more marked in the last half-century—possibly in England, certainly

elsewhere—than before. While the laborers or consumers could not have become much richer by division of the resulting gain among themselves, the large profits of the relatively few entrepreneurs have made many of them rich. Mountains are thrown up by intense dynamic action, to be worn down gradually and secularly. Of entrepreneurs—rightly called “captains of industry”—who have been made millionaires by their pioneer work, the name is legion, especially in America, where the spirit of business enterprise is greater than in any other country. Such fortunes are really a reward of ability, though the reward may often be greatly disproportionate to the ability, and certainly never has been so great before.

§ 8. *Transportation.*

Transportation industries, in their present character and importance, are creations of modern invention. The development of transportation, in means and in extent, is reciprocally cause and effect of the Industrial Revolution, and a measure of its progress. The trade between Europe and India is historically the most important of all trades involving long-distance transportation. It has been calculated that exports to India in Roman times amounted to 2 million dollars, in the fifteenth century to 12½ millions, and at the present time to 500 millions.⁶⁶ Improvements in the building of roads and canals were thought of, and beginnings were made, in the eighteenth century. But the most and greatest of these, as well as the application of steam to transportation by land and sea, are achievements of the nineteenth century. International trade in breadstuffs and in the raw materials of industry, which are now the chief sources of freight, amounted to little until the middle of that century.

Of modern means of transportation, railroads are the

⁶⁶ Huber, as cited in Schmoller, p. 464.

most important, for transportation by water has always been comparatively cheap. Railroad building has been the great promoter of industrial and commercial development, and especially, through greatly increasing the extent of the market, of large-scale production. It has also been the most important single line of expansion of the field of investment. In railroad development the United States has led all nations since the beginning, and for long has had a greater mileage than all Europe together.

It is hardly necessary to say that land-transportation, distinguished from trade or commerce, that is, buying and selling, as its technical handmaid, is, of all lines of economic activity, the most completely given over to capitalistic and large-scale enterprise. Where a service must be rendered at a particular place in conjunction with an expensive plant, direct competition is impossible, and indirect competition or substitution are either hindered or quite prevented by the requirements of place and time. The cost of rendering the service, moreover, is little dependent on the amount of use made of the plant, being chiefly a matter of fixed charges. Hence there is a possibility of "increasing returns", with growth of population and of demand, unexampled in other lines. It is the land-transportation industries, through the workings of invention and of modern technique, that are in just this condition. Growth of traffic means often an enormous increase in values for enterprises favorably situated. Means are being provided and tastes developed that cause yearly an increase of extensive travel. The growth of cities, also, makes the carrying of more and more persons from home to work a daily necessity. And freighting is bound to increase continually as modern industry carries further and further the division of labor and the local concentration of production.

Railroads, street and steam, are well represented among our American millionaires, largely owing to just gains of pioneer enterprise. The personal names—Vanderbilt, Gould, Hill, Harriman, etc.,—attached to our great American railway systems affirm the importance here of the captain of industry or the financier.

In railroads and the like, capitalization has much more than kept pace with capital invested. Indeed, the latter is, in many cases, about represented by bonds. By process of capital investment and capitalization together, American steam railways now have a commercial valuation of $11\frac{1}{4}$ billion dollars. This capitalization of differential or monopolistic advantage—the same process as is observed in city ground-values—of course affects street as well as steam railroads. Such capitalization of increasing incomes greatly multiplies that “capital” and that abstract property which are the material of large fortunes. Of course the occupier of the opportunity gets the benefit of such developments. Whence many millionaires.

§ 9. *The Modern Commerce of Capital.*

The increasing importance of trade is due to a progressively more complete supplanting of the natural by the money and credit economy, and to the greater weight of the finer processes in manufacture, which have back of them a larger number of exchanges. The complaint of commercialism and of the dominance of the pecuniary point of view in modern life is not without warrant, but the tendency is at the same time not without justification. Capital and its income have followed the general tendency. The last half-century has seen developments in the commerce of capital which could not have been imagined before. These developments are important phases of the already discussed increase in amount and differentiation

in kinds of capital. Banks, which are institutions trading in credit and abstract capital, have greatly increased in importance. In thirty years, from 1874 to 1904, the resources of the national banks of the United States increased to more than $3\frac{1}{2}$ times the amount at the earlier date.⁶⁷ Bank clearings and their tendency are likewise significant of the increasing use of credit and of the increasing fluidity and abstractness of capital. In 1906 the total of clearings for the United States was nearly three times the amount of fifteen years before. Clearings at the New York Clearing House in 1906 were $14\frac{1}{2}$ times what they were fifty years before.⁶⁸ Commercial banks are primarily manufacturers and standardizers of short-time credit or dealers in commercial paper. They use very little of their funds for permanent investment. The differential agent of the industrially inactive accumulator of funds, however, is the savings-bank, especially for the small saver, and the recently established American institution, the trust company. These for a small margin act for their patrons as insurers of regular income and expert judges of securities. Savings-banks and trust companies seek long-term investments in mortgages and stocks and facilitate the evolution of abstract-property income. Such institutions have also exhibited remarkably rapid growth.⁶⁹

The banker and stock-broker see things in terms of money-value. Through them and their like, instruments and means of production, even more completely than is

⁶⁷ The amount in December, 1874, was \$1,902,409,638; and in September, 1904, it was \$6,975,086,504 (Rept. Comptroller of the Currency, 1904, I, pp. 518-9, 538-9).

⁶⁸ For N. Y. \$104,676,000,000 and for the U. S. \$159,809,000,000 in 1906. (*Commercial and Financial Chronicle*, vol. 84, p. 75. Figures for comparison are from the Comptroller's Report.)

⁶⁹ For certain statistics of savings banks see footnote below at pp. 135-136.

the case with consumption goods under the dominance of market conceptions, come to be treated as if the money-value aspect were almost exhaustive of their qualities. So much of the state of industry comes thus to be built upon a basis of mere money values and on credit in terms of money that a disturbance in such money-exchange and credit adjustments destroys the equilibrium of business. Attempts at more conservative readjustment bring on the commercial panic and forced liquidation. Commercial crises are characteristic of the last century and of the most advanced industrial countries. Value-gains to the few, as well as losses, in the process of readjustment and revaluation are sometimes enormous. The money values which have declined but little in times of depression have gained relatively very greatly. The men who are best able to extricate themselves, who have protected themselves best from the start, are of course the skilled professional dealers in abstract capital.

In the business of investment the insight of the purchaser of stock may be such as not merely to give to him those most valuable in proportion to their price, but, if those in the business of investment are in general shrewd and conscientious, and if their judgment prevails, as it will more or less, only meritorious enterprises will receive the support of inactive capitalists, and there will consequently be a saving of capital and a greater product for society. There is room thus for the development of the entrepreneur in the business of investment. Under dynamic conditions especially, the better foresight and judgment of the expert in securities prevent waste of new accumulations and in effect increase capital. In time, too, perhaps the financial experts will be able to do better than merely extricate themselves from commercial crises. The productiveness of the picker of the best industrial enter-

prises is derivative or secondary, like that of the producer or saver of capital. But it is not the less important for society. The importance of the function is shown by the appearance of a special class of business men and business institutions that serve as agents of inactive investors for this purpose of choosing investments. Thus for the owner of capital its character as abstract property is made perfect.

Bankers should be the ones to check the tendency of the business community to strain credit beyond the limits of safety. The banker is in a position to be best able to interpret rightly general tendencies in evidence in the investment market. But bankers in general seem as yet to be carried with the tide. Only the shrewder ones know when and where to call a halt, often much to their own profit, but with little effect on the drift towards overstrain, panic, and depression.

The banking and brokerage businesses are about the best kind of training for dealing in values of securities, hence from this class of business men are especially likely to come those who, from a small beginning, make themselves rich by "investments", that is, by speculative gains from spontaneous increase in the value of securities. Speculation in stocks, too, whether professional or incidental, is the most tempting and fruitful of all speculation.

§ 10. *Speculation, Professional and Other.*

Time- and place-values are of greater commercial importance in the modern world than they have ever been before. This is an inevitable result of the increasing dominance of the exchange and money economy and of technical improvements facilitating transportation. While these technical improvements should in the long run—assuming the remedialness of recurrent commercial

crises—work for the reduction of the uncertainties of trade and narrow the sphere of the professional speculator, in the process of their rapid development they have for the time-being increased his opportunity. Invention also frequently changes conditions of manufacture, necessitating unexpected adjustments. Real estate speculation has flourished with the growth of cities. The development of large-scale production and combination is throwing more and more new issues of corporate securities on the market, the investment character of which is not yet known.

The professional speculator is a sort of entrepreneur with the commercial side magnified indefinitely and the organizing and industrial side left out. The proceeds of speculation are incremental income and are like abstract-property income in respect of being of a differentiated non-administrative character. Conjuncture profit and speculative gain are characteristic of trade. Changes in the conditions and relations of production and consumption are the basis of speculation. Time-values are its subject-matter. Speculative risks are a necessary incident of mercantile occupation, that is, of buying to sell again. But the merchant seeks his gain chiefly by enhancing place-values. His importance is a reflection of the importance of transportation. The specialized speculator attends to *time-values*.⁷⁰ The speculative element, and resulting incremental gain, is never absent from commercial transactions, even those of the producers of elemental and form-values. But "producers" try to reduce to a min-

⁷⁰ Cf. the following: "The trader's service to society consists in getting goods from one market into the other. His normal profit consists of the normal margin between the prices in the different markets. The speculator's profit, on the other hand, comes from fluctuations in price in the *same* market; he may buy from and sell to the same person and still perform his function." Emery, *Am. Ec. Assn.*, 12th Annual Meeting, p. 109.

imum the speculative risk. Merchants also are often glad to be able to secure themselves against losses from changes of price with time. Hence there is a legitimate place for the professional speculator, as one who insures even values by smoothing out the fluctuations of supply and demand.⁷¹ If this work is well done, the outcome is negatively productive, that is, there is prevention of maladjustment and waste of values. In putting themselves in a situation to gain by changes in value, speculators reduce such changes. Their purposes pertain clearly to values rather than to valuable things. Their intentions do not include the creation of valuable things or valuable qualities, so it is doubtful if their function can at best be considered productive in the full meaning. The greater their efficiency, too, the less their gain or "reward". This proposition may justly be stated in mathematical terms of inverse proportion, as is the case of no other class in economic society. But their operation may be very beneficial, and their gain may be earned. The adequate performance of the function supposes, however, that speculators know more of prospective changes in prices than do producers, and even more than most merchants. There must also be competition of numerous speculators who know, so that the public shall get the benefit of their foresight. Their function is highly important under conditions of production in a money economy for the market.

Time- and place-values are relatively personal, varying with individual taste and exigency. Elemental and form-values are relatively impersonal, more completely amenable to generalizing treatment, and to social judgment

⁷¹ Professor Emery (*Speculation*, p. 113ff.) gives statistics which seem to indicate the importance of speculation in reducing fluctuations in prices. But, as he says, other factors which enter are quite as important. Improved means of transportation count for much in a comparison with previous conditions.

and social valuation. A "fair price", that is, a fixed and generally acceptable market price, is more nearly conceivable in the case of these latter. In the former the skilful bargainer and speculator finds his great opportunity. He can play upon the uncertainty and indefiniteness in the mind of the other party to a sale with a profit to himself limited chiefly by the scale of the transaction. It is seldom that his methods are clearly unfair. But it is sometimes difficult to draw the line between overreaching in bargaining and downright plunder. He needs to be held in check by competitors equally versed in market lore and lure.

Though speculators may perform a service to the community, the similar service of those who are not professional speculators but are active entrepreneurs incidentally taking advantage of market conditions is more certain. The active entrepreneur who is a "business man" is likely to possess a sounder knowledge of his particular field than the professional speculator. If he makes the most of superior judgment as to future conditions by buying raw materials when they are a good bargain and holding off when they are unduly costly, and by manufacturing for stock in dull times, he may make a "profit" out of value-increase which men do not usually grudge him. In fact they are likely to consider it earned, though it is not effort or sacrifice but commercial shrewdness which secures its acquisition. If there are enough of such business men in a position to compete effectively with each other, not only is society benefited by their commercial shrewdness, but the profits are not disproportionate to the service. They are likely still to be much greater than the profits of the manufacturer who does not pay much attention to the fluctuations of the market.

We need a term for the class of men who are clever in seeing where there will be value-increase. Business men

are in general those who have most of this quality. Speculators are a smaller class looking to this sort of thing only, but they are tempted by this particular aspect of all business, especially as things focus in the stock market, and hence do not know this or that particular line so well as the business man. The speculator, moreover, is likely to be such not particularly by reason of his fitness for the calling, but because he has the gambling instinct. The mere inclination to take risks, to find some basis for a bet, even if there be method in the madness, is not a thing that ought to be greatly rewarded, though in fact it sometimes pays very well indeed. Even in the case of the more legitimate incidental speculative activity of the business man, there is seldom a due proportion between effort or capacity and pecuniary proceeds.

Fluctuations of value and gains from value-increase, whether professional, incidental, or even involuntary, may not be individually greater than they used to be, but they are of greater importance than ever before, because of the universalizing of the money measurement of goods and the basing of business and prices on credit. Speculative gains play a greater or less part in the profit of all sorts of entrepreneurs. Banker and broker acquire too much of a knowledge of stocks not to use it, at least incidentally and occasionally. No merchant or dealer can entirely avoid speculative risks, and he does not always wish to. The commercial side of the work of the entrepreneur in manufacturing is inevitably becoming more and more important. The business man who buys on credit is in effect a dealer on a speculative margin, though the uncertainty may be comparatively small. Credit is the great means of professional speculation by marginal holdings as well as a source of disturbances which afford more occasion for it. Even the farmer, though he is the most helpless of en-

trepreneurs in relation to price changes, figures much on future prices and even occasionally, perhaps wisely, buys "May wheat".

An international market for the raw materials of manufacture has developed the specialist speculator in cotton, wheat, and other produce. The service to economic society from legitimate speculation of this sort, though not different in nature, is clearer than in the case of stocks, because industry is directly benefited by steady prices, or prices determined ahead. But all lines of production, either in their produce or in their securities, contribute material for speculation. Prices of securities are rather result than cause of conditions of production, hence the great primary branches of production depend little upon them. But the complicated nature of their determinants and their sensitiveness to all sorts of influences and particularly to general credit conditions, make them the most attractive material for professional speculative dealings.

The favorite material of speculation is stocks. Stock speculation was fashionable in the days of Law and of the South Sea Bubble; but the present opportunity is immeasurably greater. The total of listed and unlisted securities of the New York Stock Exchange was, between 1868 and 1902, multiplied to five times the amount at the earlier date.⁷² Stock-speculation results usually, that is, for the inexpert, in a loss, but may result in the getting of a fortune, and many fortunes have been made large in this way. The percentage of profit on a margin may be a multiple of many times the investment. And those who come out leaders or "are let in on the ground floor" are few enough so that they may become

⁷² Pratt, *Work of Wall St.*, p. 82. The amount in 1902 (Jan. 30) was \$15,019,085,962. The estimate for 1868 is \$3,000,000,000.

rich. Moreover, dishonest manipulation of stocks by "insiders" did not altogether cease when Gould was driven from control of the Erie Railroad.

The policy of over-capitalization on the part of mining, industrial, and other corporations—itsself a speculation—supports the tendency to speculation.⁷³ Reorganizing corporations—both means and result of speculative handling of them—and underwriting new issues afford such opportunities for speculative gain as were never before known.

The gains of the modern promoter and financier are speculative in their nature. Since time is the essence of speculation, it seems paradoxical to speak of "timeless gains" of such men.⁷⁴ Yet the closing of deals necessary to the organization of a combination is so little a question of mere time that it would be pointless to express the gains of the promoter and financier as a rate per cent. per annum upon an investment. The possible contribution to large fortunes is, of course, all the greater. The Morgan syndicate which financed the United States Steel Corporation, by holding themselves ready to furnish 250 million dollars, and actually advancing only 25 millions, made a profit on the transaction of 50 millions in twelve months.

But no one can tell what the future may bring forth. Speculators are at most but relatively better informed than their fellows. There is reason for supposing that the average speculator is not better able to forecast the future than other dealers. Speculation, because of ignorance, may as well increase as reduce fluctuations in prices. Speculation, even for the sharpest and best in-

⁷³ Cf. Ripley, *Trusts, Pools, and Corps.*, p. xxii.

⁷⁴ Cf. Veblen, *Business Enterprise*, p. 124. Elsewhere (pp. 167-8) he speaks of the "traffic in vendible capital" as the most important source of great fortunes known to history.

formed, always contains an element of uncertainty, that is, it appeals to the gambling instinct. The fact that it is to a degree a game of skill merely strengthens its attractiveness, for the egotism of each tells him he has the skill. That one or few should gain much by the loss of others never has been an extensively effective deterrent in human conduct. The lottery is based upon just this principle of concentrating many small losses in a few great prizes. The institution of marginal holdings gives to stock speculation the charm of a lottery. With such extraneous means of attraction, it is safe to say that only a small minority of speculators are recruited from the shrewdest, most experienced, and best informed of the mercantile classes. But the more numerous the sheep and lambs who *don't* know, the more profitable the shearing for the one who knows or is lucky, or is both knowing and lucky. Some, too, play with loaded dice, that is, they "rig the market".⁷⁵ It has been said that the cost of the gold mined in the world—at least before the recent application of improved technical processes under large-scale production to low-grade ores—exceeded the value of the product. The fortunes made in California gold-mining are not inconsistent with this, but form a part of the reason for it. So it is with the fortunes made in "stocks". And they, too, are numerous.⁷⁶

Speculation is of course undertaken by men of diverse ability and knowledge, and their inequality obtains magnified expression in the pecuniary results. But as speculation approximates in character to mere gambling, the situation does not become favorable to equality in the results. According to the mathematical theory of proba-

⁷⁵ For Mr. Conant's description of the process, see *Atlantic Monthly*, 1906, p. 238.

⁷⁶ See note at end of chapter.

bility, a purely chance distribution and redistribution of gains, with possessions originally equal, creates inequality and continually increases its degree. Gains from speculative practices are always contributory to economic inequality.

§ 11. *The Economics of Government.*

The chances of war are, through speculative enterprise, a great cause of large fortunes. War, aside from its uncertainties, destroys capital and increases the value of present goods, thus raising the rate of interest and causing a decline in the value of income-yielding property. Changes in taxes,⁷⁷ the fluctuations of public credit and perhaps of paper money, government contracts for certain kinds of goods urgently needed, all give the shrewd capitalist and merchant his chance. Our American crop of millionaires began to be noticeably important in the period just following the Civil War. Strictly political sources of riches are, under modern conditions, less important than formerly. But government and war as economic factors still considerably affect the growth of fortunes.

Public debts, as we have seen, were about the earliest great form of abstract property, and have always been a favored material for inactive investment. The "financing" of princes and states has been a source of riches since the very beginnings of modern private finance. Such is the suggestion of the names Medici, Fugger, and Rothschild.⁷⁸ Lending money to princes was a very

⁷⁷ David A. Wells (*Prac. Econ.*, p. 198) estimates that \$100,000,000 was made by distillers and by speculators and dealers in distilled liquors on account of the changes in taxes between July 1, 1862, and Jan. 1, 1865.

⁷⁸ For an account of the origin of the fortunes of the latter two, see Rich. Ehrenberg, *Grosse Vermögen*.

risky business, and was correspondingly gainful when well-judged. With the establishment of popular government, national debts are felt to be more secure, and the people have become very familiar with this form of abstract property, so that now there is probably a tendency to decentralization of holdings, at least as compared with other securities. National and other public debts have grown so in the last century,⁷⁹ though they also grew at an enormous rate in England in the eighteenth century,⁸⁰ that there is room for both small and great. Two billion six hundred million dollars of debt

⁷⁹ The national debt of the world in 1905 amounted to approximately \$35,000,000,000 (1906 World Almanac, p. 159, "from summary prepared by the Bureau of Statistics, Department of Commerce and Labor"). Figures for the national debts of the principal countries of the world at various dates are given in the Census of 1880 (vol. VII, Valuation, Taxation, and Public Indebtedness, p. 267), as follows:

1848.....	\$7,627,692,215	1870.....	\$17,117,640,428
1860.....	10,399,341,688	1880.....	23,286,414,753

The figures for 1848 are for France, Great Britain, Russia, Spain, Italy, United States, Austria-Hungary, Portugal, Holland, Canada, Sweden and Norway, Greece, German Empire (to 1870 the German Confederation), Denmark. In 1860 Turkey is added; in 1870 Australia and Roumania. In 1860 Sweden and Norway are not included, but they are at other dates. For these same countries the latest figure (from the World Almanac as above) is \$26,311,000,000. This should be increased by a matter of hundreds of millions on account of the Russo-Japanese War. These figures take no account of debts of local governments, municipalities, etc., which are much more recent, but are now of comparable importance. The national debt of Great Britain amounted to \$61,317,900 in 1700, and was increased by the numerous wars of the 18th century, and especially by the Napoleonic Wars, till it stood at \$4,389,583,000 in 1815. (From figures of Dudley Baxter, *Census as above*, p. 270.) The debt of France had a checkered career in the 18th century, with frequent scaling down or repudiation.

⁸⁰ Hume described the possible ways by which an end might be put to a national debt as either "natural death" or "violent death", neither of which involved payment.

was created by our own Civil War. Such developments have not promoted economic equality.⁸¹ To provide a warring government with funds is a greater undertaking now than it was in the days of Charles V. But financial powers have grown at least as rapidly as the needs of states, so it is said to be possible for a few financial magnates to determine whether a great European state shall go to war and when it shall make peace.

For governmental policies to be directed by the economic interests of some particular class is older than mercantilism, whose modern heir lineal is protectionism. Universal suffrage has lately meant a hearing, and more practical things, too often of mere private class interest, for organized labor. But the business man is an older hand at manipulating or "owning" politicians. We can see his influence in the recent renaissance of "colonization", in the interest of exploiters of the resources of the tropics. The results of the insufficient education of the voter and of the politician in the distinction between private interests and the public interest are not favorable to the "small" but economically independent people of the middle and manual labor class.

In another way, however, modern governmental policies tend more and more to promote economic equality in certain respects. If there be, on the whole, a marked tendency to concentration in private riches, there is a considerable offset against this in the great development of public property. Such wealth is most of it collectively or democratically enjoyed. Even where wealth publicly owned is operated with a view to revenue, other motives

⁸¹ Professor Henry C. Adams (*Pub. Debts*, pp. 39, 50) says that public debts tend to perpetuate class distinctions. He quotes statistics of the ownership of bonds, and believes (p. 47) corporate ownership cannot be considered an alleviation of the inequality. For such statistics see footnote, p. 48, above.

besides profit influence the policy of the government in regard to it.⁸² The conditions of labor are notably good and wages high, perhaps notoriously high, in such employment. Under popular government the amount of public property will probably continue to increase. Popular government has already doubtless greatly favored the tendency toward collective wealth. De Toqueville, in his day, admired the enterprise of Americans in the execution of great public works, "in a nation which contains, so to speak, no rich men".⁸³ Semi-public endowments for educational and charitable purposes are also acquiring more and more importance. The great private corporation is significantly pointed to as a stage of transition to socialism. It is at any rate developing methods of business organization from which municipal corporations and the state may learn much.

It must not be forgotten, however, that public works are paid for chiefly by the issuance of bonds, which are private riches. Not until these are paid off is there a clear gain in public property by public "ownership".

A peculiar sort of state activity—peculiar as regards the logical or possible outcome at any rate—is state aid to investors, by intention, of course, so far as it is intentional, to small investors. French politicians are not anxious to adopt measures to reduce the public debt, because it is so broadly held and so popular a form of investment. The policy of the English postal savings bank since 1896 involves a gratuitous gift of interest to small receivers of abstract-property income. The general desirability of such practices is, to say the least, problematical. Their democracy is more than questionable.

⁸² Adolf Wagner (in a university lecture) makes the statement that one-third of the income of the Prussian people is income of the Prussian state, and one-fourth of the people are in its employ.

⁸³ II, p. 191.

§ 12. *Interest Rates and Tendencies.*

The rate of interest has an important place in the comparison of rich and poor, for upon it depends somewhat the degree of separation between the two. It is from income, in its two forms, income from property and income from personal effort, that riches or more riches must be accumulated. The comparative possibility of achieving riches depends upon the absolute amounts of these forms of income; but the comparative importance of a given degree of accumulation depends on the rate of interest. The rate of interest may be low while incomes from property are large, if there is already considerable concentration. Large income from personal effort and foresight, at least to the extent of putting oneself in the way of a gift from nature or from society, must be the original source of riches. Further accumulation is facilitated by a high rate of interest; any given degree of riches is also more easily reached. For the one who must begin with nothing, a low rate of interest is, on the whole, a barrier to riches. But there are those already rich, and with large incomes from property. For them further accumulation is still easy and the low rate of interest puts others at a disadvantage, so long as the large incomes from property are much larger than the large incomes from personal effort. Family pride will sustain the effort of those already rich to keep their relative position in the face of a falling interest rate. In some cases riches will increase without effort or sacrifice as the rate of interest declines. This is the situation of those who have sources of fixed income, like land and "monopoly", which will be bid up as interest falls. But as regards those whose source of savings is from personal effort, provision for the future by income from property becomes, in effect, the sacrificing of present possibilities

to a more and more remote future. As the interest rate falls these will save rather for a reserve and thus in limited amount. The lower the interest rate, the greater the economic separation, other things equal, between the rich and those with income only from effort.⁸⁴ And the rate of interest is lower than it used to be.

The low rate of interest may, however, be the opportunity of the entrepreneur and thus may help to create numbers of large incomes from personal effort and make riches easier of achievement to the class most likely to originate fortunes. But where the rate of payment is low, it is more necessary for the entrepreneur to have some capital of his own as a margin for insurance if he is to benefit by the low rate. The gains of entrepreneurs, too, in such piping times of large-scale production as the present, are not the moderate gains of many, but the large gains of a few. Hence it may be doubted whether the low rate of interest in its relation to active profit-making promotes the extension rather than the centralization of wealth. But, with interest low, inequality of personal ability is probably more likely to produce inequality of property.

A falling rate of interest has an unfavorable effect on accumulation from income from personal effort for the achievement of riches, since it weakens the motive to save and may prevent saving for investment where there is considerable sacrifice involved, that is, among those with small incomes. But for those already rich a declining rate of interest is an incentive to save in order to maintain social position. It is also a symptom of large saving. Falling interest favors the activity of entrepre-

⁸⁴ Paul Leroy-Beaulieu (*Repartition des richesses*, ch. ix) says a low rate of interest diminishes saving in the upper classes and increases it in the lower. Perhaps he believes the latter because he is a Frenchman, but why the former I cannot see.

neurs. But it also tempts to speculation and may ruin many an entrepreneur and owner who were not satisfied with the rate of income on secure investments and have embarked without sufficient knowledge in hazardous business. The falling rate indicates that inactive accumulations are more than keeping pace with the expanding field of investment.

The *amount* of interest income, together with the fact of high degree of concentration in its distribution, is most important in relation to the growth of large fortunes, and is *more* important the lower the rate of interest. The amount of capital is increasing, as we have seen, much more rapidly than population. Wages and salaries per capita are also increasing. It is a question whether income from property or income from labor is increasing the faster.⁸⁵ But income from property is itself much less democratically distributed than salaries and wages.^{85a} And such incomes are by comparison perpetual and thus, as well as from their size, afford clear possibilities of accumulation for permanent investment not contained in income from labor. Hence, provided the strength of the motive to save is the same in the two classes, conditions are favorable to further concentration.

That most savings must come from the rich, and that further concentration of riches is continually in process, is implied in the familiar argument in behalf of the rich, that it is their social function to save.⁸⁶ Although the argument is much less convincing for America than else-

⁸⁵ It is Giffen's view (1883, p. 619) that capital is weighing more, but its income less, in the scale.

^{85a} Cf. footnote above at pp. 44-7.

⁸⁶ Giffen, *e. g.*, 1883, p. 622; and Philippovich, p. 321. It has been suggested that here is an automatic remedy for monopoly, in that the monopolist must find investment for his savings, and thus competition will be revived.

where, it does appear plausible that the rich are the only ones who can afford to save for investment. The greatest incomes are incomes from property, and certainly great saving with least cost may occur among such. So far as interest is re-invested, there is a geometrical growth of riches. "To him that hath shall be given." So far as it is true that money makes money—and it is largely true—the factor of previous concentration must soon outweigh all natural inequality of ability. And the process may now proceed almost regardless of ability. With the development of modern abstract-property devices, lack of ability has lost much of its effectiveness in destroying fortunes. The rich are given an initial advantage which they are no longer in much danger of ever losing.

It is a curious argument of some⁸⁷ for inherited economic inequality that great fortunes descend to men of corresponding inherited ability. It is hard to see why in justice he who is handicapped by nature should also be handicapped by human institutions. But we are not concerned here with the question as to the justice of such arrangements. It is doubtless a fact that there is some tendency to an association of ability, at least of a certain kind, with inherited means. The fact that concerns us is that such an association must tend to increase concentration of riches. Simply put, if the ratio of ability is as 1 to 2 and of initial means as 1 to 2, then, when a union of greater ability with the greater means works out its effect, the resulting economic inequality will be as 1 to 4. Thus the concentration is not proportioned to ability, even if based on ability. And it must be remembered, too, that it is not the whole amount of ability so much as the degree of its concentration upon

⁸⁷ Cf., *e. g.*, Schmoller, in his recent controversy with Bücher. The argument is more often implied than clearly stated.

a particular aim that determines its effectiveness. It is concentration of ability and effort upon getting rich or getting richer, an aim that is not particularly worthy, that creates the greatest fortunes. In other words, it is narrowness as well as ability.⁸⁸ This counter-argument loses some of its point if it is meant that the rich by inheritance are to devote themselves, not to economic, but to general social functions, for which their means give them the opportunity. But then the grounds for admission to the favored circle of those receiving income without labor are little related to functions when admitted. The argument may still mean much as applied to the inheritance of some means, but is no defence for the continuance of very great fortunes.

The amount of income from property received by inheritance is already highly concentrated and tends to become more so in geometrical ratio. Such income of the rich is practically all free income, that is, income not mortgaged for necessities, hence it is practically all available as means of further acquisition. The fact of the inheritance of fortunes, considered from a purely economic point of view, operates in the direction of further concentration of riches, and is reënforced as a factor in inequality in proportion as interest rates are low.⁸⁹

⁸⁸ The temptations of riches are a destructive factor; but narrowness is perhaps also a protection here, at least if the margin is small, that is, where the person is not very rich.

⁸⁹ The present essay treats of one phase of the larger problem of "distribution" so ably stated by Professor Cannan in his article on the Division of Income (*Qu. Jr. Ec.*, XIX). Among other things he says: "Every one knows that in all, except the newest 'countries,' the inequality in the amounts of property which individuals have received by way of bequest and inheritance is by far the most potent cause of inequality in the actual distribution of property." This probably is as yet an overstatement for the United States, though not for England. We have elsewhere treated of the development of abstract property as conditional to the full force of this factor.

§ 13. *The Outlook for Small Savers and for the Small-Propertied Middle Class.*

There is a certain weakness in the argument for the importance of the rich as those performing the social function of accumulation.⁹⁰ While the sacrifice involved in saving is less great in proportion to size of income, the legitimate strength of the motive to save is, in a rough way, correspondingly less great, so that concentration would seem, *a priori*, to leave the effective tendency to save just where it was. This conclusion follows unless we assume that there is a limit to the possibility of personal expenditure—which is true only of *rational* expenditure. But the case is stronger against the effective functioning of the rich as savers. As between incomes equally large, the one salary or income from labor, the other income from property, the motive to save on the part of the former is much the greater, for, aside from the desire for income from property on its own account, there is need of accumulating a reserve or provision for the time when labor is no longer possible or when the head of the family is taken away. From equal amounts of income, distributed, one sum among numerous receivers of moderate salaries, and the other among a few rich as the income from their property, there will, other

Cannan further says: "As time goes on, the savings of each generation of men must come to bear a smaller and smaller proportion to the property which has come down to them from previous generations" (p. 366). This applies to savings out of income from personal effort, but not of necessity to savings out of income from property. It is because it results in greater separation between these two classes that a low interest rate in effect increases inequality.

⁹⁰ Cf. Giffen, 1883, p. 622. On the other side cf. Roscher, p. 618. Schmoller ventures a guess at the proportion of savings coming from different classes. He assigns two-fifths to small savers, and three-fifths to entrepreneurs, through their great gains, and to the rich. Grundriss, pp. 634-5.

things equal, be a much larger amount of saving from among the salaried class. This is true, even allowing for deductions resulting from the use of accumulations as reserve. The comparison is obscured by the fact that other things are *not* equal. That is, those already possessing considerable property are, by birth and habit, on the whole, likely to possess more of an instinct for pecuniary accumulation. But even assuming a saving instinct among the propertied classes, conditions would appear to be more favorable to further accumulation if existing accumulations be held by a numerous small-propertied class, instead of being concentrated in the hands of a few rich. This is not a mere speculation. France is, of the progressive European nations, the land of the small-propertied class.⁹¹ But France is also the land of thrift and of great total savings. The paying of the German indemnity was accomplished so quickly as to surprise the world. France — though with England given a great start — has not only for long been the great creditor and financial support of Russia, but is now the land which is looked to for supplying the world market with new capital. This adds noticeably to the importance of France in international politics.⁹² This position of France as

⁹¹ Neymarck (Jr. Roy. Stat. Soc., 1896, pp. 540-2) presents some significant figures of ownership of investment paper in France. Such figures probably could not be matched by any other country. Of course allowance is to be made for division of risk through the investor's owning small quantities of several different stocks. The French learned well the lesson of the Panama Canal experience. Division of risk, too, naturally increases with the inactivity of the investor, that is, with the increase of abstract property. A comparative study of statistics of estates of decedents in France and other countries, however, shows a marked difference in favor of France as regards concentration of property. See the writer's article mentioned above.

⁹² This is believed in financial circles to be one reason for the yielding of Germany in the Algeiras Conference. Cf. *N. Y. Evening Post*, Mar. 10, 1906, also Apr. 28, 1906.

the great moneyed nation is based upon the saving power of the salaried and small-propertyed class. England has relatively lost ground, probably by very reason of her greater concentration of riches. This development of small saving has of course had to wait for the modern organization of investment institutions. The anxiety with which our American financiers are coming to cultivate and humor the "outside public" of small investors appears to indicate a similar tendency to a shift in the character of the class of savers in this country.⁹³ The function of the rich as *the* accumulators of capital appears to be a thing of the past.⁹⁴

It has been argued, in considering the development of abstract property, that it has thus far been, on the whole, favorable to the concentration of riches. The evidence supports this view. It has also been shown, however, that it is intrinsically just as possible for abstract property to be the means of equalization of ownership.⁹⁵ Education

⁹³ "The industrial movement must stand or fall by the proposition whether industrials are or are not to become an investment for the small capitalist." James B. Dill (p. 110) in an address on Industrials as Investments for Small Capital.

⁹⁴ There are those who write against the "fallacy of saving," arguing that the older economists were mistaken in extolling parsimony as a social service. This difference of opinion seems to be due to a difference in point of view resulting from the growth of abstract property. Could not American agriculturists well expend billions in improving their land and appliances? But they need first to pay something on the mortgages. Better streets and roads, and other public works, would pay indirectly if not financially. Expenditures for permanent improvements could economically be made in all lines of production and consumption. But if we think only of abstract pecuniary income, it is true that too rapid accumulation and the too anxious seeking of profitable investments mean disturbance of business conditions.

⁹⁵ "In my opinion the greater distribution of which I am speaking was the result of limited liability." Goschen, 1887, p. 596. He refers to the decentralization of the holding of the stocks of certain companies as they become older. Age itself must normally spread

in the qualities of paper property has until recently been lacking. Such property still needs adaptation to the demands of small investors. But these requirements once met, the ultimate result may be greater equality in abstract-property incomes. A small-property class, accustomed to personal sacrifices, lacking personal initiative, and valuing security above all else, may in time buy out many of the larger holders of abstract property. They can outbid both the spendthrift rich and the active entrepreneur class. More stable conditions of production will favor them. The fall in the rate of interest is probably in part due to greater and greater elimination of irregularity and risk; this again is partly a result of the demands of abstract-property seekers. A condition to a supplanting of the rich by small savers is that the abstract-property character of securities attain to its highest development, that is, that the income be fixed and the risk be, so far as humanly possible, eliminated.⁹⁸ But it is the tendency of present-day methods of organization to expand just this type of security. Savings-banks and trust companies have developed as the agents of the inactive investor, giving those seeking abstract-property income the benefit of their expert knowledge of investments and the advantage of division of risk. The recent and rapid growth of the trust company in the United States is especially significant. So the ultimate result of the abstract-property development may be to equalize the ownership of property. As for the few functionless hereditary rich who will still remain, their relation to the social order will then

somewhat the shares of a company by process of partial sales, aside from the direct incentive to such distribution for the sake of virtual insurance by division of risk.

⁹⁸ Bonds are more perfect abstract property than stocks. It would be interesting to know whether there is any difference in the degree of concentration of ownership of these two classes of securities.

be so clearly *nil*, that governmental action may be expected to divide the property of the very rich on their decease, thus reversing the policy of primogeniture adopted by feudalism. Abstract property is a middle-class opportunity, though it may be doubted whether it is so good a middle-class opportunity, being non-functional, as that provided by economic conditions which favor the small-sized, but independent, form of productive enterprise. American farmers are a wealth-owning and wealth-administering class that will probably continue to dominate in the rural districts. It is the small urban "*bourgeoisie*" that have suffered as a result of the Industrial Revolution. But the evolution of abstract property may finally cure that condition of which it has so far been so largely the cause.

Property in life insurance, which has developed so greatly in the last quarter-century, is important as a support of the middle class.⁹⁷ The millions of accumulations form, in effect, small properties available when most needed. The numbers holding life insurance we should expect to increase as the salaried class grows and takes the place of the older propertied middle class, though business men also are likely to insure heavily.⁹⁸

⁹⁷ Life insurance is a mode of saving and providing a reserve which we might expect to be a favorite resort of the salaried, and to some extent of the better wage-earning, class. Rising from an unimportant sum in 1850, the amount of policies in force at various dates was (U. S. Statist. Abstr., 1905, p. 123):

1880.....	\$1,584,717,001	1894.....	\$5,566,166,664
1884.....	2,095,810,106	1899.....	7,774,280,005
1889.....	3,657,669,776	1904.....	12,547,937,441

Of course the actual present value of such savings would be better represented by the assets of the companies. These were:

1880.....	\$452,680,651	1894.....	\$1,073,156,679
1884.....	519,786,617	1899.....	1,595,208,408
1889.....	720,237,645	1904.....	2,498,960,968

⁹⁸ The increase in the number of insured can hardly be an indica-

Savings institutions are supposed to be for the benefit of the "working classes", but are very largely patronized by the small-propertied class. In either case the increase of their deposits is a good sign, even if that is largely due to the fact that they are a comparatively unsatisfactory resource of those who would, in other times, have been directly small owners and administrators of productive wealth. They open to all the door to the possession of abstract property, an important advantage especially for the city proletariat.⁹⁹

tion of the increase of the propertied class, as Goschen (1887, p. 598) implies, but rather of the tendency to a salaried class in their stead. As regards mere numbers, too, there has been a great development of so-called industrial insurance in England and America.

⁹⁹ Following are statistics of savings banks, etc., at intervals of five years, since 1850 (Statistical Abstr. of the U. S. for 1905, pp. 634-5):

Date	Deposits in savings banks (thous. dola.)	No. of de- positors, (in thousands)	Deposits in loan and trust cos. (thous. dola.)
1850.....	\$43,431	251	
1855.....	84,290	432	
1860.....	149,278	694	
1865.....	242,619	980	
1870.....	549,874	1631	
1875.....	924,037	2360	\$85,025
1880.....	819,107	2336	90,008
1885.....	1,095,172	3071	188,417
1890.....	1,550,024	4250	336,456
1895.....	1,844,358	4876	546,653
1900.....	2,389,720	6107	1,028,232
1905.....	3,093,077	7696	1,980,857

The increase in the amount of deposits in such institutions of course does not mean quite a corresponding increase in savings. It is necessary that the people acquire the habit of using such institutions. They will also use them more in proportion as the opportunity to receive direct income from concrete productive wealth is relatively less. For this reason, too, deposits in savings banks are not wholly, or even mainly, the savings of the people, for the middle class has probably been more and more forced into such lines of investment.

In addition to the possibility of a renewal of life for the small-propertied class, and also in part as a means to

(Pres. Wright's opinion—based upon certain Massachusetts Labor Reports—is that one-half demonstrably belongs to wage-earners. *Atlantic Monthly*, vol. 80, p. 303, footnote.) But it is certainly not the rich that put their property here. The loan and trust company, on the other hand, may act to a considerable extent as an investing agent of the rich. As regards the number of savings-bank depositors, they are of course not all heads of families, but rather more nearly—if one must choose between extreme assumptions—all the grown-up or partly grown-up members of families that deposit at all. Many of the well-to-do, also, are known to deposit in several banks.

The following comparison of the United States with other countries as regards savings institutions is significant. "The total deposits in all the savings banks of the world, according to latest official information received by the Department of Commerce and Labor through its Bureau of Statistics, amounted to over 10½ billion dollars, contributed by 82,640,000 depositors. Of this total the United States shows aggregate deposits of \$3,060,179,000, credited to 7,305,000 depositors. As the figures used in arriving at the grand totals cover about one-half of the population of the world, viz., over 770 millions, it appears that the United States, with less than 9½ per cent. of the total population considered, contributes over 29 per cent. of the total savings deposits recorded. Of the total number of depositors, or rather deposit accounts, the share of the United States is somewhat less than 9 per cent., while the average deposit per account is more than four times, and the average savings per inhabitant more than three and one-half times the corresponding averages for the rest of the world." (Comptroller's Rpt. 1904, vol. I, p. 38).

The building and loan association, a form of lower middle and working class investment characteristic of the United States, has been in a stationary or declining state in the most recent period. Assets at recent dates (Stat. Abstr. U. S., 1905, p. 122) were:

1893.....	\$528,852,885
1898.....	649,423,380
1903.....	599,550,855

This is not necessarily a bad symptom, however, since it is probably due to the competition of better forms of investment.

It is significant of the power of small savers that, even in a country which presents so high a degree of concentration as the United Kingdom, they appear to be making noticeable gains at a critical point, that is, in the ownership of real estate. Giffen says (1883, p. 617): "Out of 190 million pounds assessed under Schedule A in

such reinvigoration, there is the prospect of a continuance of the expansion of the high-salaried or salaried, as distinguished from the wage-earning class.¹⁰⁰ The members of this class are chiefly officials of corporations.

1881-2, the sum of 11,359,000 pounds was exempted from duty as being the income of people whose whole income from all sources was under 150 pounds a year." This schedule includes only capitalistic income, described as "from the ownership of lands, houses, etc." The annual value of property entered under Schedule A in 1901-2 and relieved from duty on the ground that the total incomes of the owners from all sources did not exceed 160 pounds was 25,806,833 pounds, out of a total gross assessment under Schedule A of 238,231,937 pounds (Com. Inland Rev., p. 181). Five and nine-tenths per cent. of the total income of this kind was exempt at the earlier date, and 10.8 per cent. at the later.

Allowance must be made, it is true, for the change in the minimum taxable. But a change from 150 to 160 pounds is an increase of only one-fifteenth. Suppose the incomes added to the exempt list averaged 155 pounds and those that would have been exempt under the previous limit averaged 75 pounds. Since the incomes not amounting to a subsistence minimum are few anyway, and still fewer among those possessing some income from property, this latter assumed average is absurdly low, and therefore favorable to attributing much of the change to the added class. And suppose the numbers in the two classes proportioned to their range. This is also rather favorable to an unduly good showing for the added class, since the pyramid of incomes tapers decidedly below this point. Then the added one-fifteenth of exempt cases would mean an addition to the amount of income exempt, not of one-fifteenth or 6.7 per cent., but of $(155 \times 1) / (75 \times 15)$ or 13.8 per cent. This is certainly inadequate to account for very nearly a doubling of the amount exempted on the ground of its receipt by persons with small incomes. In twenty years there has clearly been a very great gain in the ownership of real estate by people of small incomes in the United Kingdom.

Altogether, the statistics cited justify the conclusion that there has recently been, in the United States and elsewhere, an important increase in the number of small owners of income-yielding property, especially of abstract property.

¹⁰⁰ We may analyze United States statistics of occupations in a way to throw light on this question of the growth of the salaried class. Excluding the agricultural group altogether from the comparison, and reckoning as representatives of the salaried class or better (*i. e.*, entrepreneurs): Bankers and brokers, Officials of banks and com-

This tendency is hailed by some as the development of a new sort of middle class which will be an adequate sub-

panies, Manufacturers and officials of manufacturing companies, etc., Merchants and dealers (wholesale and retail), and Persons in professional service, we find the per cent. these constitute of the total in non-agricultural gainful occupations. (The basal numbers for these ratios were obtained from the Special Report on Occupations, pp. 1-11.) The percentages for successive census years are:

1870.....	12.3	1890.....	13.2
1880.....	12.3	1900.....	13.3

Excluding teachers from the comparison, the per cents. are 10.6, 10.2, 11.0, 11.2. There is thus indicated, except during the first decade included, a steady gain of this group upon others, which is doubtless due to the growth of the salaried class. The demand for higher commercial and engineering education is a result and symptom of the growth of that class. If we include farmers, planters, and overseers, and reckon the per cent. of these to the total in gainful occupations, the showing is different for the last decade. But this can be explained by the fact that agriculture, with its high proportion of independent entrepreneurs, is relatively losing ground. The salaried class is a phase of commercial and industrial, rather than of agricultural, development.

Owing to a change in the classification, it is not possible to compare the ratio of "salaried officials, clerks, et.," to "wage-earners" as reported in the Census of Manufactures of 1890 and 1900. Such a comparison with the Census of 1900, not only as regards numbers but also as regards average income of salaried officials and wage-earners respectively, is possible for the Census of Manufactures of 1905. In the five year period, salaried officials, clerks, etc., increased in number 42.7 per cent., while the number of wage-earners increased but 16.0 per cent. (Bul. 57, p. 9). The average salary increased absolutely more, but relatively less, than the average wage.

There is here a possibility of erroneous inference. As the corporation progressively displaces other forms of business organization, its salaried class takes the place of independent entrepreneurs and small proprietors. There is thus an increase of the salaried class in proportion to the total occupied. This increase, however, is not a net gain for the "middle" class, but is primarily compensatory, though perhaps also more than that. The increase of those occupied in certain kinds of professional service indicates that it is more than compensatory. It appears, too, that the salaried class is gaining considerably relative to the wage-earning class.

stitute for the propertied middle class. It certainly is a gratifying tendency; but the salaried class is not, as such,

For the United Kingdom one index of the increase of the salaried class is the gross income assessed under Schedule E of the income tax, that is, "salaries of government, corporation, and public company officials." The gross income assessed under this head in the year 1901-2 was 79,151,425 pounds, an increase of 53.4 per cent. over the year 1892-3, and of 5.0 per cent. over the year 1900-01. (Com. Inland Rev., p. 205.) The number of assessments in 1892-3 was 246,789, and in 1901-2 it was 342,259, an increase of 95,470, or about 39 per cent. The conversion of private concerns into public companies of course constantly tends to increase this class at the expense of the schedule for incomes from "businesses, concerns, professions, employments", etc., so that the increase is a compensatory, and not a net, gain for the middle class.

In the German statistics of occupations, the class of *Angestellte* corresponds to our "salaried officials, clerks, etc." The number of these at the dates given was as follows (the figures given in Zahn, Conrad II, p. 604):

	1882	1895	Absolute increase	Per cent. increase
<i>Landwirtschaft</i> ...	66,644	96,173	29,529	44
<i>Industrie</i>	99,076	263,745	164,669	166
<i>Handel</i>	141,548	261,907	120,359	85
<i>Überhaupt</i>	307,268	621,825	314,577	102

The increase in the total number of persons occupied was 17.80 per cent. Entrepreneurs employing assistants increased, in the period from 1882 to 1895, 1.3 per cent., laborers 62.6 per cent., officials 118.9 per cent. (Schmoller, Grundriss, p. 436). This introduction of business officials between proprietors and wage-earners is a result of large-scale industry, and indicates the growth of a salaried class, but also the displacement of a small-entrepreneur class.

The French classification of occupations does not lend itself to convenient comparison of like nature.

The general conclusion from these figures is obvious. The salaried class is of increasing importance under the modern régime. This increase has its highly encouraging aspect. Modern industry is directly creating another middle class in place of the one it tends to destroy, though we cannot say how far the gain is full compensation for the loss. This gain, with the ulterior possibilities which it presents, is one of the most important progressive features of the situation.

a true middle class between rich and propertyless. A high salary is not an equivalent substitute for an equal income from property, for it is not permanent. And the bridging of the gap between the large-propertyed and the high-salaried class becomes increasingly difficult as the rate of interest falls. Of course a high salary may facilitate the accumulation of a small property. The salaried and the small-propertyed class together, by their savings, probably afford the greatest demand for secure abstract property. The final outcome of this situation is likely to be favorable to the middle class.

Summary.

It has been the aim of this chapter to show how the economic developments of recent times have promoted the growth of such forms and kinds of production and exchange as, on the whole, are favorable to the growth of large fortunes. These tendencies have been particularly strong in the United States. Agriculture, which remains a great field of small-scale production, has flourished, but at nothing like the rate of manufactures and mineral industries. And against the ownership of agricultural land there has probably been a considerable increase of comparatively centralized mortgage debt. Meanwhile the urban and industrial population, where economic inequality flourishes, has been growing at a rapid rate. Large-scale production and the corporate organization of business has been increasingly dominant in everything but agriculture. The greatest increase in recent production in the United States has been in lines where large-scale production, or economico-technical concentration of wealth, has prevailed and is becoming more and more dominant. Manufactures are conspicuously

and increasingly of this character. Mining is even more completely an industry of large-scale production. Large-scale production increases the dominance of the capitalist, adopts the corporate form, and extends the regimental organization of labor. These developments have proceeded at an accelerating rate. Ours is a highly dynamic age. In such a soil the commercial and speculative point of view, with corresponding gains from value-increase in real estate, in securities, and so forth, has bulked larger than ever before. Everything has been coming the way of the business man. Altogether these developments have enormously favored the growth of capital and of large fortunes.

NOTE TO CHAPTER III.

AN ANALYSIS OF LISTS OF MILLIONAIRES (COMPILED BY THE N. Y. TRIBUNE AND THE N. Y. WORLD) IN THE UNITED STATES.

In 1892 the New York *Tribune* published, as a supplement (*Tribune Monthly*, June, 1892, "American Millionaires"), a list of American millionaires, which has been made considerable use of by statisticians. The editor describes it as "a substantially complete and correct catalogue of the persons in the United States who are reputed, by their friends, and neighbors, and by well-informed business men in their respective communities, to be worth a million or more of property, or in very close proximity to a million" (p. 4). He further says the list includes rather too many than too few names. As regards the number of millionaires indicated, it is perhaps not very reliable, and the error is probably one of exaggeration. But errors of this kind do not affect the validity of conclusions drawn from the following analysis. The source from which a fortune is derived is much better known to the public than its amount. A calculation and comparison of the relative importance of the various sources of riches, furthermore, is not appreciably affected by some indefiniteness of the information as to whether each particular fortune is of such a size as to come within the line bounding the class for which the comparison is made—provided there is no bias in the compiler, such that he seeks to increase the importance of this or that source. In view of the purpose of the *Tribune* list, there may be a slight bias in the direction of mini-

mizing the importance of protected industries as sources of great fortunes. But the work appears to have been carefully and honestly done.

In the *World Almanac* for 1902 there is also a list of millionaires, but much less carefully worked-up with reference to the origin of the fortune. Indeed, the single word given to the description of each millionaire appears to be what he would report as his occupation, and thus the knowledge of the source of his fortune is not a datum, but only a generally valid inference. Even if the occupation is rather the effect than the cause of the possession of a large fortune, by inheritance perhaps,—and it is doubtless to some degree both effect and cause—the affinity between the occupation and the possession of riches remains of much significance.

A summary of the relative weight of the sources of large fortunes, as indicated by the *Tribune* list, together with the proportion of males occupied in corresponding main classes of occupations, follows:

	Tribune list of Am. millionaires			Males in gain- ful occupations in 1900	
	No.	Per cent. of all	Per cent. for occn.	No.	Per cent. Dis- trbn.
I. Agriculture and grazing....	84	2.1	2.4	7,787,539	41.4
II. Professional service	73	1.8	2.1	632,646	3.3
III. Domestic and personal service	24	0.6	0.7	2,553,161	13.6
IV. Trade and transportation...	1752	43.3	49.9	3,157,600	16.8
V. Manufacturing and mechanical pursuits	1140	28.1	32.5	3,972,132	21.1
VI. Mineral industries, forests..	436	10.8	12.4	718,012	3.8
VII. Various sources combined, or source not stated.....	538	13.3	...	.....	...
Totals	4047			18,821,090	

(The figures for occupations are from the 12th Census Abstract, p. 24, with the groups slightly rearranged as indicated in the following:

I. "Agricultural pursuits," less lumbermen and raftsmen and wood-choppers (to VI). II. As in Census figures—includes showmen and some patents. III. As in Census—includes hotel-keepers. IV. "Trade and transportation" as in Census, plus fishermen and oystermen. V. "Manufacturing and mechanical pursuits," less iron and steel workers, oil-well and oil-works employees, saw and planing mill employees, marble and stone-cutters (all to VI), fishermen and oystermen (to IV), and

miners and quarrymen (to VI). VI. As taken out from the above. VII. Relates to millionaires but not to Census of Occupations. Includes: gift, where not reducible to others, real estate, "capitalist" not further defined (especially in the *World list*), estates undergoing settlement, etc.).

In detail the *Tribune* list's classification, rearranged, is as follows:

I. Total	84
Cattle-raising in the West and lands, mainly.....	47
Fine stock-raising and fortunate investments in lands and securities	3
Wool-growing in Ohio, and lands.....	1
Plantations, farming, and land.....	15
Cotton raising in the South.....	4
Sugar plantations in the South.....	3
Tobacco growing in the South, and lands.....	3
Plantations in W. Indies and S. America, mainly.....	6
(One-half) seeds and nursery business, mainly.....	2
II. Total	73
Law practice and investment of profits in real estate and securities	65
Medical practice and real estate investments.....	1
Royalties on patents.....	3
Show and circus business, with investment of profits in real estate, securities, etc.	3
Made in Tweed Ring, N. Y. City.....	1
III. Total	24
Hotel and restaurant business with real estate investments	24
IV. Total	1752
Merchandizing mainly, with, in great majority of cases, the investment of profits in real estate, banks, and securities generally	986
Banking and the investment of profits in real estate and securities, mainly.....	294
Brokerage business and stocks.....	56
Insurance business, mainly.....	6
Grain elevator, storage warehouses, and wharf business	17
Railroads, development, consolidation and management of	186
Telegraph and telephone development.....	12
Express business; pony express, mail contracts with other business	20
Steamboating on the rivers and in the harbors.....	20

Deep sea shipping, in some cases combined with foreign trade	75
Whaling, deep sea shipping and ocean trade.....	4
Coasting and lake shipping, mainly.....	31
Other mercantile enterprises.....	8
(One-half) seeds and nursery business, mainly.....	2
(One-half) local enterprises, gas works, water-works, street railroads, ferries, etc.....	35
V. Total	1140
Manufacturing mainly, but in many cases with investments in real estate, banking, etc.....	619
Contracting and building railroads, streets and public and private works generally; asphalt street pavements	84
Tanning and leather business.....	49
Distilling, mainly	32
Brewing and real estate, mainly; malting.....	81
Packing and provisions.....	34
Sugar refining, mainly.....	29
Flour milling	16
Publishing—news and story papers; books with general printing in some cases; music; lithographing...	58
Shipbuilding and repairing.....	3
Making special patented and proprietary articles.....	93
Other manufacturing	7
(One-half) local enterprises, gas-works, etc.....	35
VI. Total	436
Coal, iron, zinc, lead, copper or quicksilver mines.....	113
Silver and gold mines.....	73
Oil producing, refining and transportation.....	72
Smelting and refining metals.....	6
Marble quarries, but with other investments.....	2
Other mining	2
Saw mills and lumber, sometimes with other investments	138
Pine lands and sale of logs.....	19
Dealing in timber and mineral lands.....	11
VII. Total	538
Real estate, advance in value with growth of population, and improvement of.....	468
Loaning money and real estate.....	9
Miscellaneous investments	6
By inheritance and gift, original sources of the fortune	

unknown	34
Origin of fortune entirely unknown.....	21

Grand total 4047

The most striking fact in the table is, without doubt, how very unproductive is the soil of agriculture for the growth of millionaires. One hundred years ago the United States was almost exclusively an agricultural country. In the last generation or so the salient facts in the economic history of the country have been the growth of manufacturing, transportation, and mining—and of millionaires. But we need to look behind the face of the returns in the *Tribune* list of 84 millionaires for agriculture and grazing. Of these 84 full 47 are not representative of agriculture. They made their fortunes by "cattle-raising in the West," that is, by exploiting the national domain. The other "representatives" of the American farmer in the list should also be noted.

It is significant that, of the 73 men primarily engaged in professional service, or so classed, 65 are lawyers, presumably corporation lawyers. But of course they have invested in real estate and securities, that is, have been speculators.

In the *World* list the millionaires are classed as follows:

	World list of Am. millionaires			Males in gain- ful occupations in 1900	
	No.	Per cent. of all	Per cent. for occn.	No.	Per cent. dis- tribution
I. Agriculture and grazing....	31	1.0	2.0	9,296,547	39.1
II. Professional service	72	2.3	4.5	828,163	3.5
III. Domestic and personal service	7	0.2	0.4	3,485,208	14.7
IV. Trade and transportation...	700	23.0	44.0	4,331,332	18.2
V. Manufacturing and mechanical pursuits	583	19.2	36.7	4,615,190	19.4
VI. Mineral industries, forests..	197	6.5	12.4	1,197,765	5.1
VII. Occupation not classified (several interests), or not stated	1455	47.8	...	.....	...
Totals	3045			23,754,205	

The *World's* list in some detail is as follows:

I. Total	31	
Farmer, breeder, planter.....		8
Cattle, live-stock		23
II. Total	72	
Lawyer		44

Physician	2
Politician or government official.....	6
Author	1
Inventor	1
U. S. Senate.....	18
III. Total	7
Hotel or restaurant keeper.....	7
IV. Total	700
Merchant	295
Banker	271
Broker	38
Financier	28
Insurance Co.	3
Railroads	44
Street railways	10
Telegraph	3
(One-half) hardware and ice.....	8
V. Total	583
Manufacturer	313
Manufacturer, iron and steel.....	50
" leather	33
" tobacco	25
" textiles	54
Gas Co.	4
Publisher	26
Distiller	13
Brewer	57
(One-half) hardware and ice.....	8
VI. Total	197
Coal	30
Mines of various sorts.....	47
Oil producing and refining.....	28
Lumber, pine lands.....	92
VII. Total	1455
Capitalist	837
Director of corporations.....	134
Realty	148
No occupation given.....	336
Estate undergoing settlement.....	516
Grand total excluding "estates".....	3045
Grand total for entire list.....	3561

One of the significant facts that stands out in the statement of occupations of millionaires in this list is the prominence of abstract-property interests among these very rich men. This makes it less valuable for certain purposes than the former list, where the effort was made specifically to bring the origins of the fortunes into connection with some concrete and definite line of production. But it is all the more significant in another way. The "capitalist," in business parlance as in economic theory, is no longer an entrepreneur, whether as manufacturer or in some other definite line. An entrepreneur engaged in a definite line of production would doubtless give that as his occupation. The "capitalist" is presumably interested in various corporations. The numerousness of "financiers" and of "directors of corporations" is of like significance. The banker is an earlier result of the same process of differentiation, and also rather a curator of abstract property than an administrator of concrete productive enterprise.

It is to be noted, in both lists, how often "real estate" and investments help to account for the origin of fortunes. That is, speculation and mere commercial shrewdness have played their part in most cases. The "unearned increment" is much more susceptible of rapid agglomeration than earnings.

Not only should numbers be taken account of in the above figures, but also how many times certain men are millionaires. Some are a hundred times that. This often has its effect in making several heirs and relatives millionaires, where the fortune was made some time ago, but is still given only a small part of the weight that it should have. In what direction allowance for this factor would throw the indication of the comparisons is shown by the mention of the names of some of our multi-millionaires: Rockefeller (oil), Carnegie (steel), Astors (urban realty), Vanderbilts (railways), Goulds (railways), and so on.

CHAPTER IV

CERTAIN PECULIARITIES OF ECONOMIC HISTORY AND CONDITIONS IN THE UNITED STATES.

§ 1. *The Background*

The United States represents nearly all the distinctively modern economic tendencies in their highest degree. If modern tendencies are such as favor the growth of large fortunes, we should expect the United States to be more fertile in the production of these than any other country. This is fundamentally what accounts for the fact that the United States, once the land of economic equality, is now known as the land of the multimillionaire.

Of conditions at the beginning of our national life we could scarcely find a more competent observer than Benjamin Franklin. He says: "Whoever has travelled through the various parts of Europe and observed how small is the proportion of the people in affluence or easy circumstances there, compared with those in poverty and misery; the few rich and haughty landlords, the multitude of poor, abject, and rack'd tenants, and the half-paid and half-starved ragged laborers; and views here the happy mediocrity, that so generally prevails throughout these States, where the cultivator works for himself, and supports his family in decent plenty, will, methinks, see abundant reason to bless Divine Providence for the evident and great difference in our favour, and be convinced that no nation that is known to us enjoys a greater share of human felicity."¹ Elsewhere he says: "Though

¹ Franklin, Writings, Vol. X, p. 120 (1784).

there are in that country [of the United States] few people so miserable as the poor of Europe, there are also very few that in Europe would be called rich: it is rather a general happy mediocrity that prevails. There are few great proprietors of the soil, and few tenants; most people cultivate their own lands, or follow some handicraft or merchandise; very few [are] rich enough to live idly upon their rents or incomes; or to pay the high prices given in Europe for Paintings, Statues, Architecture and other works of Art, that are more curious than useful".² This last touch is not the least significant point in the quotation.

For *ante-bellum* conditions let De Tocqueville be our reporter. In several places his remarks show how much impressed he was with the general equality of conditions prevailing among the people. "Men are there seen on a greater equality in point of fortune and intellect, or, in other words, more equal in their strength than in any other country of the world, or in any age of which history has preserved the remembrance."³ "The number of large fortunes [in the United States] is small, and capital is still scarce."⁴

The following is from a contemporary of ours: "Sixty years ago there were no great fortunes in America, few large fortunes, and no poverty. Now there is some poverty (though only in a few places can it be called pauperism), many large fortunes, and a greater number of gigantic fortunes than in any other country of the world."⁵ Continuing, Mr. Bryce says: "The number of these [large fortunes] seems likely to go on increasing, for they are due not merely to the sudden development of

² *Ibid.*, vol. VIII, p. 604.

³ I, p. 67.

⁴ II, p. 191.

⁵ Bryce, *Am. Com.*, II, p. 745.

the West, with the chances of making vast sums by land speculation or in railway construction, but to the field for doing business on a great scale, which the size of the country presents". And:⁶ "While many great fortunes will continue to be made, they will be less easily and quickly spent than in Europe, and one may surmise that the quality of material conditions, almost universal in the last [18th] century, still general sixty years ago, will more and more diminish by the growth of a very rich class at one end of the line, and of a very poor class at the other end of the line".

A review of certain peculiarities of conditions in the United States will round out the argument that explains how this great change has come about. Europe has a historic past favorable to economic inequality, and still mainly determining its land ownership, while for the United States the contrary is true. The contrast with our past may account in part for the extent of our reputation as a producer of millionaires.

§ 2. *Development of Great Economic Possibilities.*

The rapidity and magnitude of the development of natural resources in the United States are unexampled. This fact is most striking as exhibited in our mineral industries, whose part in our large fortunes is very great. Grants from the public domain under the Homestead Act have had an opposite tendency. But the middle class of farmers cannot always be recruited from this source.⁷ And the public domains, also, figure largely in the production of millionaires—not without the taint of timber and cattle frauds. Pertinent also is the fact that grants

⁶ *Ibid.*, p. 746.

⁷ "The eldest son generally takes the land, and the others go and seek their fortune in their desert." De Toqueville, I, 375.

of public lands to railroads have exceeded the amount acquired by individuals under the Homestead Act.⁸

Despite expansion over the prairie, there has been a continued shifting of the American population cityward, where property is less equally distributed. This is by no means peculiar to the United States, but it is a great change from the past,⁹ and a part of the process of making us modern and assimilating our condition to that of Europe. The United States is losing its character as an agricultural country. But in the great cities develops the contrast, and the conflict, of plutocracy and proletariat.¹⁰ In the Middle Ages the city developed the middle class of handicraftsmen and merchants, counter to feudalism. But now the conditions of production favor a country middle class.

Monopolistic possibilities in scarce natural factors, such as oil, anthracite, and iron, have been a basis of great accumulations in the United States. Such possibilities have not been equalled in other countries. The occupation of partial monopolies in transportation, such as steam and electric roads, the telegraph and telephone, has been left to private individuals in this country to a degree that does not hold for any other. England, though also

⁸ Statistics to be found in the Rpt. of the Public Lands Commission, p. 361, Senate Doc. No. 189, 58th Cong., 3rd Session.

⁹ "Consider the great proportion of industrious frugal farmers inhabiting the interior part of these American States, and of whom the body of our nation consists; and judge, whether it is probable the luxury of our seaports can be sufficient to ruin such a country." (Franklin, Writings, X, p. 121.) "For one artisan or merchant, I suppose we have at least one hundred farmers." (Same, p. 117.)

¹⁰ "I look upon the size of certain American cities, and especially on the nature of their population, as a real danger which threatens the future security of the democratic republics of the New World; and I venture to predict that they will perish from this circumstance unless," etc. De Toqueville, I, 370.

a comparatively *laissez faire* country, owns her telegraph system, and her municipalities, most of them, own street-railways and other public-service plants. Some measure of the possibilities of capitalization of such opportunities is furnished by American railway and public-service corporations. Railroads, by their discriminations, have also been able to confer monopolistic advantages on favored shippers.

Nowhere has industrialization and the development of large-scale production proceeded at a more rapid rate than in the United States. The growth of manufactures—as we to-day understand the term, that is, not hand-trades¹¹—in the United States has been entirely a development of the last century, and chiefly of the period since the Civil War. Our tariff policy has aided this development of manufactures and therefore has promoted the production of millionaires. In the case of some protected articles the personal effect of the policy has probably been altogether too direct.¹² The development of the “trust” in America as nowhere else is symptomatic of the general character of tendencies in production here towards a greater centralization than elsewhere, which affects not only the size of the business unit but also the size of fortunes. There is probably a considerably greater development of business corporations in the United States than in France or Germany, though perhaps not more than in England.

The rapidity and magnitude of our development of natural resources and of industrial possibilities have prepared a fertile field for speculation, pure or mixed, in real estate, raw materials, and stocks.

¹¹ In Hamilton's Report on Manufactures, household and family or farm manufactures are much in evidence “besides regular trades.” Cf. Works, vol. III, p. 349.

¹² Taussig, Tariff History, esp. the ch. beginning at p. 194.

§ 3. *Socio-Economic Characteristics of Americans.*

There are certain combined social and economic peculiarities of the American people which cannot be left out of account in considering the causes of large fortunes.

The American people are probably less inclined to make sacrifices in order to accumulate property, or even a reserve for sickness or age, than people of other nations. The American is not frugal. He has not known poverty well enough to make him so. The very self-reliance of the American workman, and the high wages that have been largely the cause of that self-reliance, make him attach less importance to income from property. It is not so much needed to supplement income from labor and is not considered so much better. The prestige of income from property is less felt here and there is more respect for labor than in Europe.

As a result of their greater welfare, American consumers are comparatively inattentive to small gains and to slight differences in prices. The waste of the American household, as compared with the French, is a stock illustration of this difference. The American tolerance of indirect taxation—a point about which foreign governments envy ours—is perhaps chiefly due to this same cause. The customary American “nickel” basis for street-car fares is partly due to our system of coins—as compared with the typical 10-pfennig fare of Germany—but it is also due to the American tolerance of a comparatively heavy charge for a necessary daily service. Thus is promoted the increase of franchise values and of riches. Consumption does not fall off so markedly in America as a result of a slight advance in price, say of oil or beef. Large-scale production, requiring demand on a corresponding scale, can be extended to articles of luxury in

America to a degree not possible with less prosperous peoples.

By selective dissociation through migration and by the stimulus of a favoring environment, the Americans are, as a people, "pushing" and energetic. The most that is in a man is likely to be brought out. But the dead level remains the same. In some there is nothing to bring out. American push and energy, therefore, when directed to economic acquisition, must inevitably emphasize inequality of possessions.

Work is by comparison the tradition and habit of all in America.¹³ When a scion of one of our multi-millionaire families recently reported "gentleman" as his occupation, the thing was commented on as new and interesting. The businesslike traits of the American are due very largely to the character of the example set by our "leading men". Family pride in a non-working, non-functional ancestry has not yet grown up among us, though the seed is germinating.

Riches are the only form of secure power in the United States. Though this is a social, rather than a primarily

¹³ Birth "is a commodity that cannot be carried to a worse market than that of America, where people do not inquire concerning a stranger, What is he? but, What can he do?" (Franklin, VIII, p. 606). "There are no descriptions of men in America and very few individuals, at the active times of life who live without some pursuit of business, profession, occupation, or trade. *All the citizens are in active habits.*" (Tench Coxe, *View of the United States*, p. 441.) "Amongst a democratic people . . . the notion of labor is presented to the mind, on every side as the necessary, natural, and honest condition of human existence. . . . In the United States, a wealthy man would think himself in bad repute if he employed his life solely in living. It is for the purpose of escaping this obligation to work, that so many rich Americans come to Europe, where they find some scattered remains of aristocratic society, amongst whom idleness is still held in honor." (De Toqueville, II, 184.)

economic cause, it is too important to omit mentioning. It is often remarked that in America riches are the great road of ambition, if not the only road. This is partly a result of the thorough modernness of America.¹⁴ And many of the rich appear to find no better way to spend their time than in further accumulation. The public service is not automatically opened to the rich,¹⁵ as to the leisure class of England. We have been busy developing our natural resources and have left politics to less able men.¹⁶ For literature and art our rich are little qualified, certainly not in the first generation.

Selective dissociation of the money-getters from the masses has been greatly facilitated by high wages and much free income, that is, income above necessities, from which the savings for a start on the road to riches can be made. "Poor boys" are perhaps more numerous among those who have become millionaires than among our Presidents, and are only less often used as "shining examples". But the pioneer period is past. In the future, growth from nothing will in every respect be less easy. It will be relatively as well as absolutely more difficult, because of the weight of riches already accumulated. As with our public lands, so in the field of investment, what is of most worth is already occupied. And previous accumulation itself is a factor, not operative under the Homestead Act, which promotes inequality in the latter field.

Many of our rich are "in the make" still, though the output already has not been small. The making process

¹⁴ With money economy and modern conditions "the desire for wealth, as the means of gratifying the desire of social distinction and all else, became a much more important factor in economic affairs than it had been before." (Cunningham, I, 465.)

¹⁵ Is the United States Senate an exception?

¹⁶ Cf. H. C. Adams, *The State in Relation to Industry*, p. 71.

is the greater present danger to our social and political system. But the result of the process also, that is, high degree of concentration of ownership as an accomplished fact, is believed by many to be not consistent with our historic social and political institutions.

It is possible that our development may not continue in the same direction. The evolution of capital and of abstract property may ultimately cure that high degree of economic inequality of which it has so far been the great cause.

CHAPTER V.

SUMMARY AND CONCLUSION.

In conclusion let us restate the general facts involved in the foregoing argument.

Large fortunes or riches are a social phenomenon not personally but impersonally and economically caused. The great fortunes of to-day, as compared with the fortunes of previous times, are different in character as being not due to political causes. They are, moreover, not to be explained by the great ability of their possessors. Human nature is not different from what it used to be. Inequalities of ability are not greater. But the economic world is different. If a due proportion can be said to obtain between ability and economic situation, economic ability has never before come to its own, or else it is now getting much more than its share of material success.¹

The great general cause of larger fortunes, that is, the circumstance of to-day which is different from that of fifty or one hundred years ago, is a difference in the amounts and forms of wealth, of ownership, and of income. This is the inclusive aspect of the various specific causes, which, though with no claim to completeness, we have attempted tentatively to enumerate and analyze.

¹"It is these unequal faculties which give us unequal fortunes, and so long as they exist the inequality of conditions resulting must lead to unequal surroundings." (Wright, *Atlantic Mo.*, vol. 80, p. 308a.) This is perfectly true. But it does not touch the question as to the justifiable degree and proportion of inequality. Professors Laughlin (*Atl. Mo.*, vol. 96, esp. pp. 42b and 46b) and Sumner (*Independent*) have expressed themselves similarly to Pres. Wright.

Since the Industrial Revolution there has been an enormous increase of productive wealth—an increase still proceeding at an accelerating rate. The rich under barbarous and oriental conditions are rich in consumers' goods. The feudal rich possess the revenues of political power. The modern rich are such because of the dominance of capital in production and distribution. The great precondition to the growth of modern great fortunes has been this growth of productive wealth.

Not merely in the amount of productive wealth, but also in the nature of productive instruments, the rich have been favored by technical and other developments of the last century. Large-scale production has become more and more dominant in all fields except agriculture. In order to be an entrepreneur on his own account under such conditions, a man must be or become rich. Or, there has been the alternative that the enterprises be owned by great corporations dominated by, and managed for the benefit of, the few who are financiers or capitalists. The development of urban realty and of mines has been as unprecedented as has been the growth of manufactures and commerce in the large. Such economic changes of the last generation or two have overshadowed all things.

A remarkable evolution of forms of ownership has accompanied the growth of capital. The organization of investment has reached such a stage of differentiation that it is possible to meet the demands of those who want secure income without the responsibility of administering productive wealth. The appetite is of course large. The corporate, or stock-and-bond, form of organization is adapted to the needs of such investors. Paper property has the relation to large fortunes that the stock-organization has to large-scale production. Intrinsic hindrances to agglomeration of capital and also of riches are thus

removed. Undertaking ability is overshadowed in both the productive-economic and the private-economic spheres. If there had been no corporate securities, doubtless inequality would have found other food, but probably not anything upon which it could have so flourished.

Natural inequalities have, by the growth of capital, been raised to a higher power. If the abilities of two men are as 1 to 2, the economic inequality may be as 1 to 4, or as 1 to 16. The several inequalities, of ability and means, are bound to reinforce each other, with the result of increasing the degree of inequality, unless there is a tendency for one advantage to involve the absence of the other, or unless there is some natural check upon concentration. But the obstacles to concentration have been removed—in the first place by the provision of more and more material for fortunes, also by making it possible to concentrate riches without increasing the involved care, and finally by securing to the possessor what is already accumulated, regardless of care or capacity. Keeping riches once gained is easier than ever before. If there is any correlation of ability and energy with initial means, reinforcement of inequality results. In cases where there is not this correlation, the rich by inheritance nevertheless have a position which they can lose only by a destructive tendency amounting almost to madness. There is a cumulation of effects in the direction of economic inequality.

The age is highly dynamic. New technical developments and new economic institutions are ever in process. Place- and time-values have never before counted for so much. Under such circumstances, the rewards of the inventive, the persuasive, and the venturesome, are great indeed. Now is the harvest time of the business man, the promoter, and the speculator. Natural resources are being developed as never before. Real estate values, with

intervals of reaction, are being multiplied by the growth of population. Prices of staple products fluctuate in response to conditions of world-wide range. Stocks are the sensitive spot where focus all the influences affecting credit and investments. All these contribute to value-increase and incremental income.

The development of abstract property, the dominance of large-scale production, and the multiplication of opportunities for gain from value-increase—these three phenomena which we have sought to trace in their various phases with regard to their influence on the acquisition and distribution of property—are all characteristic and distinctive traits of modern economic society. The growth of great fortunes, though not inextricably bound up with the permanent elements of this situation, is a natural result, or even but another aspect, of these modern tendencies.

One of the remarkable phenomena of the last century has been the growth of cities. This concentration of population presents a certain analogy with the concentration of property. The motives, which are respectively gregariousness and ambition, have always been there. Economic obstacles to obtaining sustenance prevented such concentration of population till the nineteenth century. The necessity of administrative activity for the receipt of income from wealth has hindered the concentration of property. Great fortunes and great cities have grown contemporaneously because of the increase of man's economic power. But economic improvements have also made possible or probable a swing the other way. Men now talk of the urbanization of the country and of giving to it equal attractiveness with the city. The diffusion of income from property among the majority, also, is now not less a practicable ideal, but more so, on account

of the evolution of modern methods and institutions of investment.

The notion that "the rich are growing richer, and the poor poorer" raises questions different from that which we have been examining. The poor are without doubt better off than they ever were before. So far as the latter half of the proposition quoted would deny this, it is false.² The study of existing conditions and tendencies in the material, as opposed to the human, factor in production, deals with a different question from that as to the adequacy and the tendency of the income of the "laboring" classes. Only the former question is related to the growth of large fortunes. The tendency to a rise in wages is one thing. The tendency to concentration in the receipt of income from the other agency contributing to production is another thing.

Is the present situation such that a larger and larger proportion of men are becoming dependent exclusively on labor for their livelihood? The growth of large-scale production and of the wage-system makes it probable that such has been the tendency since the Industrial Revolution. But there are important counteracting forces now at work. Is there undergoing, on the other hand, as regards those who possess more or less of the other source of income, that is, property, a process of concentration into the hands of a few, and are sharper contrasts developing? Or is the tendency one towards quantitative uniformity? With reference to the absolute number of

² Pres. Wright's discriminating statement is: "To the investigator the real statement should be, The rich are growing richer, many more people than formerly are growing rich, and the poor are growing better off." (*Atlantic Mo.*, vol. 80, p. 301b.) He further says: "It is not proposed here to discuss whether the poor get their relative proportion of the increased aggregate wealth. Emphatically they do not" (p. 302b).

large fortunes, if the stuff of which riches are made is increasing, of course it would be only normal for the number of rich men to increase. But it is easy to see how recent economic evolution has probably favored an increase in the proportion, not only of the absolutely large, but also of the relatively large fortunes.

There is the bright side, too. Middle and lower class possibilities as regards income are, on account of the growth of the professional and salaried class, not less good now, but better than they used to be. Even as regards propertied income the tendency is probably now becoming more favorable to the middle and lower classes. The escape from the proletariat may be less possible in the United States than it used to be, but for the world as a whole the possibility is greater.

This is a treatise of causes. Of the consequences of concentration of property, and of its remedies, we have here nothing to say. The ultimate judgment of society upon great incomes from property should be from the side of the use made of them. The best known of our American millionaires have practiced the precepts of a Gospel of Wealth in a way to prove that the moral limitations largely accountable for the great success of some of them in business are not so fundamental as to involve the absence of public-spiritedness in those most called upon to exercise it. We believe, however, that the social, including both the moral and political, influence of so high a degree of concentration of riches as the present is, on the whole, evil. Some inequality is inevitable and also highly desirable. But inequality of natural endowment will, under any probable circumstances, insure all the economic inequality that is needed. And the inequalities in men to which inequality of property should correspond are not of mere capacity to ac-

quire wealth, but of capacity to use it well. We have too much concentration of riches. It threatens that equality of opportunity, and that spirit of individuality and self-reliance, which are essential to democracy.

A class enjoying great incomes without labor is perhaps socially rather more dangerous than one administering productive wealth. But the more urgent present problem in the economics and politics of our country is how to curb the unbridled power of the active rich and their corporations. It is also true, however, that in magnitude and in number modern large fortunes are a new and fateful development which, by reason of their magnitude, may come to need direct attention from the constituted agent of society.

LIST OF BOOKS AND ARTICLES CITED.

I. By Authors.

- Adams, Henry C. Public debts, an Essay in the Science of Finance. New York, 1895.
- Relation of the State to Industrial Action. American Economic Association, 1887.
- Ashley, W. J. An introduction to English Economic History and Theory, 2 vols. New York, 1888, 1893.
- Feudalism, in Essays Introductory to English Constitutional History, edited by Wakeman and Hassall. London, 1887.
- Bacon, N. T. American International Indebtedness. Yale Review, Vol. IX.
- Baden-Powell, B. H. The Land Systems of British India, 3 vols. Oxford, 1892.
- Baldwin, S. E. Private Corporations, in Two Centuries' Growth of American Law. (Yale Bicentennial Publications.) New York, 1902.
- Böhm-Bawerk, Eugen von. Capital and Interest, a Critical History of Economical Theory (trans.). London, 1890.
- Bryce, James. The American Commonwealth, 2 vols., 3d edition. New York, 1895-6.
- Bücher, Karl. Die Entstehung der Volkswirtschaft. 4. Aufl. Tübingen, 1904.
- Bullock, Charles J. Trust Literature, a Survey and Criticism. In Ripley, Trusts, Pools and Corporations. Boston, 1905.
- Cannan, Edwin. The Division of Income. Quarterly Journal of Economics, Vol. XIX, 1905.
- Chisholm, George G. Handbook of Commercial Geography. Fourth edition. London, 1903.
- Conant, Charles A. Industrial Securities as Investments. Atlantic Monthly, February, 1906.
- Conrad, J., etc., editors. Handwörterbuch der Staatswissenschaften. (Articles of various contributors, chiefly specified in citations). 7 vols. Second edition. Jena, 1898-1901.
- Conrad, J. (Art. in Conrad's Handwörterbuch, Vol. I.) Agrarstatistik.
- Coxe, Tench. A View of the United States of America, etc. Philadelphia, 1794.

- Cunningham, W. *The Growth of English Industry and Commerce during the Early and Middle Ages*. Third edition. Cambridge (England), 1896.
- D'Avenel, Georges. *Les riches depuis sept cent ans*. (Two articles.) *Revue des deux Mondes*, 15th February and 15th March, 1906.
- Davis, John P. *Corporations, a Study of the Origin and Development of Great Business Combinations and of their Relation to the Authority of the State*. Two vols. New York, 1905.
- De Tocqueville, Alexis. *Democracy in America* (translation of Henry Reeve, edited by F. Bowen). Two vols. Cambridge (Mass.), 1862.
- Dill, James B. *Industrials as Investments for Small Capital*. In *Corporations and Public Welfare, Addresses at the Annual Meeting of the American Academy of Political and Social Science*. Philadelphia, 1900.
- Edwards, E. J. *The New Salaried Class*. *American Monthly Review of Reviews*, Sept., 1905. Vol. XXXII.
- Ehrenberg, Richard. *Grosse Vermögen, ihre Entstehung und ihre Bedeutung*. 1. Bd. *Die Fugger-Rothschild-Krupp*. 2. Aufl. 2. Bd. *Das Haus Parich in Hamburg*. Jena, 1905.
- Eliot, Charles W. *American Contributions to Civilization and Other Essays and Addresses*. New York, 1897.
- Emerick, C. F. *An Analysis of Agricultural Discontent in the United States*. *Political Science Quarterly*, Vol. XI, 1896.
- Emery, H. C. *Speculation on the Stock and Produce Exchanges of the United States*. New York, 1896.
- The Place of the Speculator in the Theory of Distribution*. In *American Economic Association Publications, Third Series*, Vol. I, 1900.
- Foville, Alfred de. *The Wealth of France and of Other Countries*. *Journal of the Royal Statistical Society*, Vol. LVI., 1893.
- Franklin, Benjamin. *The Writings of Benjamin Franklin*. Collected and edited by A. H. Smyth, 10 vols. New York, 1906.
- Gannett, Henry. *Statistical Abstract of the World*. New York, 1907.
- Gide, Ch. *Principes d'Economie Politique*. Revised and enlarged edition. Paris, 1905.
- Giffen, Robert. *The Growth of Capital*. London, 1889.
- The Progress of the Working Classes in the Last Half Century*. *Journal of the Statistical Society*, Vol. XLVI, 1883.
- Further notes on the Progress of the Working Classes in the Last Half Century*. *Journal of the Statistical Society*, Vol. XLIX., 1886.
- Goschen, G. J. *The Increase of Moderate Incomes*. *Journal of the Royal Statistical Society*, Vol. L., 1887.

- Greene, Thomas L. *Corporation Finance*. New York, 1897.
- Hamilton, Alexander. *The Works of Alexander Hamilton*, edited by Henry Cabot Lodge. Nine vols. New York, 1885-6.
- Holmes, George K. *Progress of Agriculture in the United States. Year Book of the United States Department of Agriculture, 1899*. Washington, 1900.
- Hume, David. *Essays, Moral, Political, and Literary*. Vol. I. of Greene and Grose edition. London, 1889.
- Jenks, E. *Law and Politics in the Middle Ages*. New York, 1898.
- Jenks, J. W. *The Trust Problem*. New York, 1900.
- Johnson, E. R. *American Railway Transportation*. New York, 1903.
- Johnson, J. F. *Money and Currency in Relation to Industry, Prices, and the Rate of Interest*. Boston, (date of preface) 1906.
- Juraschek, Franz von. *Uebersichten der Weltwirtschaft*. Berlin, (date of preface) 1896.
- (Articles in Conrad's *Handwörterbuch*, as follows:) *Statistik der Aktiengesellschaften in den übrigen europäischen Staaten (ausser Deutschland)*. Vol. I.
- Bergbaustatistik*, Vol. II.
- Eisen und Eisenindustrie, Statistik*, Vol. III.
- Laughlin, J. Laurence. *Large Fortunes*. *Atlantic Monthly*, Vol. 96, 1905.
- Leroy-Beaulieu, Paul. *Essai sur la répartition des richesses et sur la tendance à une moindre inégalité des conditions*. Third edition. Paris, 1888.
- Leroy Beaulieu, Pierre. *The United States in the Twentieth Century*. (Translated by H. A. Bruce). New York, 1906.
- Lexis, W. *Grossbetrieb und Kleinbetrieb*. Art. in Conrad's *Handwörterbuch*, vol. IV.
- Locke, John. *Fundamental Constitutions of Carolina*. In Carroll, B. R., *Historical Collections of South Carolina*, vol. II. New York, 1836.
- Meade, Edward S. *Trust Finance*. New York, 1903.
- Napier, T. B. *The History of Joint Stock and Limited Liability Companies, in A Century of Law Reform*. London, 1901.
- Neymarck, A. *La statistique internationale des valeurs mobilières*. *Bulletin de l'Institut International de Statistique* (session of 1901), vol. XIII, Pt. III. Same (session of 1903), vol. XIV, Pt. III.
- The distribution of Personal Property in France*. *Journal of the Royal Statistical Society*, vol. LIX, 1896.
- Philippovich, Eugen von. *Grundriss der politischen Oekonomie, erster Band. Allgemeine Volkswirtschaftslehre*. 3. Aufl. Freiburg i. B., 1899.

- Porter, G. R. *The Progress of the Nation in its Various Social and Economical Relations*, etc. 3 vols. London, 1836, 1838, 1843.
- Pratt, S. S. *The Work of Wall Street*. New York, 1903.
- Ripley, W. Z., ed. *Trusts, Pools and Corporations*. Boston, 1905.
- Roscher, Wil. *Grundlagen der Nationalökonomie*. 23. Aufl. (Edited by Pöhlmann). Stuttgart, 1900.
- Schmoller, Gustav. *Grundriss der allgemeinen Volkswirtschaftslehre*. Leipzig, 1900, 1904.
- Shaw, Albert. *Municipal Government in Continental Europe*. New York, 1897.
- Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*.
- Spahr, Charles B. *An Essay on the Present Distribution of Wealth in the United States*. Second ed. New York, n. d.
- Sumner, W. G., and others. *Vide sub Wright*.
- Taussig, F. W. *The Tariff History of the United States*. New York, 1893.
- Tucker, George. *Progress of the United States in Population and Wealth in Fifty Years as Exhibited by the Decennial Census*. New York, 1843.
- Van der Borcht. (Articles in Conrad's *Handwörterbuch*.) *Statistik der Aktiengesellschaften in Deutschland*. Vol. I. *Volkswirtschaftliche Bedeutung der Aktiengesellschaften*. Vol. I.
- Veblen, Thorstein. *The Theory of Business Enterprise*. New York, 1904.
- Wagner, Adolf. *Statistik des Volks- oder Nationaleinkommens und Vermögens*, etc. *Bulletin de l'Institut International de Statistique* (session of 1903). Vol. XIV., Pt. III.
- Zur Methodik der Statistik des Volkseinkommens und Volksvermögens, etc. Weitere statistische Untersuchungen über die Verteilung des Volkseinkommens in Preussen auf Grund der neueren Einkommenssteuer-Statistik (1892-1902). (Articles in) *Zeitschrift des königlich preussischen statistischen Bureaus*. 44. Jahrgang, 1904.
- Watkins, G. P. *An Interpretation of Certain Statistical Evidence of Concentration of Wealth*. *Quarterly Publications of the American Statistical Association*, March, 1908.
- Wells, David A. *Practical Economics*. New York, 1885.
- Weber, A. F. *The Growth of Cities in the Nineteenth Century*. New York, 1899.
- Williston, Samuel. *History of the Law of Business Corporations before 1800*. (Two articles.) *Harvard Law Review*, Vol. II, 1888-9.

- Wirminghaus, A., und Kollman. (Art. in Conrad's Handwörterbuch). Statistik des Grundbesitzes, Vol. IV.
- Wright, Carroll D. Are the Rich Growing Richer and the Poor Poorer? *Atlantic Monthly*, Vol. 80, 1897.
- Wright, C. D., Sumner, and others. Concentration of Wealth, a Discussion. *The Independent*, Vol. 54, p. 1021, May 1, 1902.
- Zahn, Friedrich. (Art. in Conrad's Handwörterbuch). Beruf und Berufsstatistik. Vol. II.
- Commercial and Financial Chronicle. Vols. 61, 81, 83, 84. New York.
- (Various Contributors.) The Mineral Industry during 1904. (Vol. XIII.) New York, 1905.
- National Educational Association. Report of the Committee on Salaries, etc., of Public School Teachers in the United States. 1905.
- (The Tribune Monthly, vol. IV, no. 6, June, 1892). American Millionaires. Occupations in Which Men of Wealth have made their Fortunes.
- American Millionaires, list in 1902 World's Almanac, p. 135.
- The World Almanac and Encyclopedia, 1906. New York, 1905.
- The Evening Post, New York. Financial Section (weekly).

II. Public Documents

- Berlin, Statistisches Amt. Die Grundstücks-Aufnahme Ende Oktober 1900 sowie die Wohnungs- und die Bevölkerungs-Aufnahme vom 1. Dezember 1900 in der Stadt Berlin. Erster Abteilung: Grundstücks- und Wohnungs-Aufnahme. Berlin, 1903.
- France, Ministère du Commerce, etc. *Annuaire Statistique*, 23rd and 24th vols. for 1903, 1904. Paris, 1904-5.
- Massachusetts, Bureau of Statistics of Labor. Twenty-fifth Annual Report of the Bureau of Statistics of Labor (for 1894). Boston, 1895.
- Maryland, Bureau of Industrial Statistics. Third and Fourth Annual Reports. 1895, 1896.
- New York, Comptroller, Reports, 1902, 1906.
Testimony taken by the Legislative Insurance Investigating Committee (Armstrong Committee). Albany, 1906.
- New York City, Report of the Commissioners of Taxes and Assessments for the Quarter ending June 30, 1907. New York, 1907.
- Prussia, Statistisches Bureau. *Festschrift* (Centennial Volumes) des königlich preussischen Bureaus. In three parts, the third being the Statistical Atlas. Berlin, 1905.

- United Kingdom, Commissioners of Inland Revenue. Forty-sixth Report of the Commissioners of His Majesty's Inland Revenue, for the year ended 31st March, 1903.
- Board of Agriculture. Returns as to the Number and Size of Agricultural Holdings in Great Britain in the year 1895. London, 1896.
- Registrar General. Census of England and Wales, 1901. Summary Tables: Area, Houses and Population. London, 1903.
- Statistical Abstract for the United Kingdom in each of the last fifteen years, from 1888 to 1902. Fifty-first number. London, 1904.
- Same. Forty-first number. London, 1894.
- Same. Fifty-third number. London, 1906.
- United States. Bureau of the Census. *Special Reports*:
- Employees and Wages. Washington, 1903.
- Mines and Quarries, 1902. Washington, 1905.
- Occupations at the Twelfth Census. Washington, 1904.
- Wealth, Debt and Taxation. Washington, 1907.

Bulletins:

- Bulletin 21. Commercial Valuation of Railway Operating Property in the United States, 1904. Washington, 1905.
- Bulletin 57. Census of Manufactures, 1905. Washington, 1906.
- Bulletin 71. Estimates of Population, 1904-5-6. Washington, 1907.

Census Office.

- Twelfth Census of the United States, taken in the Year 1900. Reports in 10 vols. Population, I and II: Agriculture, V and VI; Manufactures, VII-X. Washington, 1901-2.
- Abstract of the Twelfth Census. Washington, 1904.
- Report on Wealth, Debt and Taxation at the Eleventh Census: 1890. Part I, Public Debt. Part II, Valuation and Taxation. Washington, 1892, 1895.
- Report on Real Estate Mortgages in the United States at the Eleventh Census: 1890. Washington, 1895.
- Report on Valuation, Taxation and Public Indebtedness in the United States as returned at the Tenth Census (June 1, 1880). Washington, 1884.

Superintendent of the Census. Statistical View of the United States, etc., being a Compendium of the Seventh Census, etc. By J. B. DeBow. Washington, 1854.

Bureau of Statistics. Statistical Abstract of the United States, 1905. Twenty-eighth number. Same for 1904. Washington, 1905, 1906.

- Comptroller of the Currency. Annual report of the Comptroller of the Currency, etc., Dec. 5, 1904. Vol I. Washington, 1904.
- Industrial Commission (under Act approved June 18, 1898). Final Report of the Industrial Commission (Vol. XIX of the Commission's Reports). Washington, 1902.
- Interstate Commerce Commission. Seventeenth Annual Report on the Statistics of Railways in the United States for the year ending June 30, 1904. Washington, 1905.
- Senate Documents, 58th Congress, 3rd Session (1904-5). No. 188. Washington, 1905.



Timely Books on Public Problems

RECENT ISSUES

PRESIDENT NICHOLAS MURRAY BUTLER'S

TRUE AND FALSE DEMOCRACY

PROBLEMS
OF ETHICS,
ETC.

Clear and convincing arguments for the insistent choice of the best and wisest to fill political office; for fuller recognition of the fact that the individual who is not politically alert and honest is a corrupter of public opinion; and of the bearings of his conviction that free institutions depend upon the intelligence of the whole people.

Cloth, xxii + 211 pp, 12mo. \$1.00 net, by mail \$1.07.

PRESIDENT ARTHUR TWINING HADLEY'S

STANDARDS OF PUBLIC MORALITY

PROBLEMS
OF ETHICS

The Kennedy Lectures for 1906, before the School of Philanthropy, New York City; upon such subjects as the formation of public opinion; the ethics of trade and of corporate management; the workings of our political machinery; and the political duties of the citizen.

Cloth, ix + 158 pp, 12mo. \$1.00 net, by mail \$1.10.

MR. ALBERT SHAW'S

POLITICAL PROBLEMS OF AMERICAN DEVELOPMENT

POLITICAL
PROBLEMS

Discusses particular problems in relation to their origin and to the parts they play in the evolution of democratic society. It covers problems of sectionalism and unity; of immigration and race; of the use of the public domain; of party machinery; of railways and trusts; of money and the tariff; and finally of foreign relations.

Published by the Columbia University Press. Cloth, 8vo, gilt top.

MR. WILLIAM B. GUTHRIE'S

SOCIALISM BEFORE THE FRENCH REVOLUTION

PROBLEMS OF
SOCIAL
THEORY

Discusses an important period in the history of the theory of socialism as to which it has been almost impossible hitherto to secure any adequate treatment.

Cloth, xviii + 339 pp, 12mo. \$1.50 net.

MR. ALFRED L. HUTCHINSON'S

THE LIMIT OF WEALTH

PROBLEMS
OF SOCIAL
BETTERMENT

Presents an imaginary condition of society (in 1942) when the government shall have regulated every possible form of public labor and utility, and shall have accomplished vast improvements by diverting to the public good all fortunes in excess of a certain maximum limit.

Cloth, xiii + 285 pp, 12mo. \$1.25 net, by mail \$1.35.

PROFESSOR JOHN R. COMMONS'S NEW BOOK

RACES AND IMMIGRANTS IN AMERICA

By JOHN R. COMMONS, Professor of Political Economy, University of Wisconsin.

Cloth, xiii + 242 pp, 12mo. \$1.50 net, by mail \$1.62.

"Not many of the writers who have essayed to instruct us on American immigration problems had the special equipment for the task possessed by Professor John R. Commons. He has long been a diligent and penetrating student of industrial conditions in this country, and particularly of the labor movement. His investigations in this latter field have brought him face to face with the situation that confronts the arriving immigrant, and he has been led to inquire into the varying abilities of different races to make use of the opportunities presented in this land for their advancement. The present volume, then, is a frank discussion of the difficulties and dangers arising from our open-door immigration policy, together with a full and fair statement of the 'negro problem' in our Southern States. The work is based on a thoroughly scientific analysis of the racial components of our population. We do not recall another book of its size that presents so much important and essential information on this vital topic."—*Review of Reviews*.

BY THE SAME AUTHOR

PROPORTIONAL REPRESENTATION

Second Edition

With chapters on the Initiative, the Referendum and Primary Elections.

Cloth, x + 369 pp, 12mo. \$1.25 net, by mail \$1.36.

MR. FRANKLIN PIERCE in

THE TARIFF AND THE TRUSTS

PROBLEMS OF TAXATION Presents cogently the argument that since the present condition of the tariff provides the opportunities for corporate exactions, the remedy may most swiftly be applied to the evils of monopoly by tariff revision. Cloth, ix + 387 pp, 12mo, \$1.50 net, by mail \$1.62.

MR. HENRY GEORGE, JR.

THE MENACE OF PRIVILEGE

PROBLEMS OF CLASS "Mr. George's strong, clear and logical work . . . is a book that every young man and woman who loves the Republic should carefully read." Cloth, 12mo, \$1.50 net. (Postage 13c.)

MR. WILLIAM E. SMYTHE'S

CONSTRUCTIVE DEMOCRACY

PROBLEMS OF GROWTH "On the whole I regard 'Constructive Democracy' as the most important economic study since 'Progress and Poverty'—and much more likely to bear the fruit of early accomplishment than was Henry George's work."—CHARLES A. MOODY in "Out West." Cloth, 450 pp., \$1.50 net. (Postage 13c.)

DR. JOHN FARLIE'S

THE NATIONAL ADMINISTRATION OF THE UNITED STATES OF AMERICA

PROBLEMS OF ADMINISTRATION is by the author of "Municipal Administration." "Any one, almost by a glance, may obtain the precise information on these matters that he may need."—*Journal of Education*. Cloth, 8vo, 274 pp., \$2.00 net.

MR. HENRY S. HAINES'S

RESTRICTIVE RAILWAY LEGISLATION

PROBLEMS OF RAILWAY LEGISLATION "The work is exhaustive, up-to-date, well-written, and not at all technical."—*The Evening Telegraph, Philadelphia*. Cloth, 12mo, 345 pp., \$1.50 net. (Postage 13c.)

MR. HUGO R. MEYER'S

GOVERNMENT REGULATION OF RAILWAY RATES

A study of the Facts of Experience, "interesting from the vigor and fearlessness with which it is presented and its mass of information."—*Boston Transcript*.

PROBLEMS OF GOVERNMENT REGULATION AND MUNICIPAL OWNERSHIP

MUNICIPAL OWNERSHIP IN GREAT BRITAIN

The book discusses with great simplicity, clearness and exactness all that may be learned from the actual working of municipal ownership where it has been tried most thoroughly.

Each is cloth, 12mo, \$1.50 net. (Postage 13c.)

Professor THOMAS S. ADAMS and HELEN L. SUMNER

LABOR PROBLEMS. A Text Book

PROBLEMS OF THE LABOR QUESTION CONTENTS: Book I. Woman and Child Labor; Immigration; The Sweating System; Poverty, Earnings, and Unemployment. Book II. Strikes and Boycotts; Labor Organizations and Employers' Associations; The Agencies of Industrial Peace; Profit Sharing; Cooperation; Industrial Education; Labor Laws; The Material Progress of the Wage Earning Classes.

Cloth, 12mo, 579 pp., \$1.60 net. (Postage 13 cents.)

MRS. FLORENCE KELLEY, Sec'y of the Consumers' League in

SOME ETHICAL GAINS THROUGH LEGISLATION

PROBLEMS OF CHILD LABOR ETC. "The book is a collection of interesting incidents gathered in this wide experience and a comparative study of the statutes and judicial decisions of the States and nation, on three vital questions—child labor, woman suffrage and the sweating system. . . . The book, as a whole, is a real tonic for all who are discouraged in their duties."—*The Boston Transcript*.

Citizens' Library, leather back, 341 pp., 12mo, \$1.25

THE MACMILLAN COMPANY

Publishers

64-66 Fifth Avenue, New York

The Citizens' Library

Of Economics, Politics and Sociology

UNDER THE GENERAL EDITORSHIP OF
Professor RICHARD T. ELY, Ph.D., LL.D.
of the University of Wisconsin

EARLIER ISSUES

STUDIES IN THE EVOLUTION OF INDUSTRIAL SOCIETY

By **RICHARD T. ELY**, *University of Wisconsin.*

RAILWAY LEGISLATION IN THE UNITED STATES

By **BALTHASAR H. MEYER, Ph.D.**, *Professor of Institutes of Commerce, University of Wisconsin.*

IRRIGATION INSTITUTIONS

A Discussion of the Economic and Legal Questions created by the Growth of Irrigated Agriculture in the Arid West

By **ELWOOD MEAD, C.E., M.S.**, *Chief of Irrigation Investigations, Department of Agriculture.*

MUNICIPAL ENGINEERING AND SANITATION

By **M. N. BAKER, Ph.B., C.E.**, *Associate Editor of Engineering News; Editor of A Manual of American Water Works.*

AMERICAN MUNICIPAL PROGRESS

By **CHARLES ZUEBLIN, Ph.B., D.B.**, *Professor of Sociology in the University of Chicago.*

ECONOMIC CRISES

By **EDWARD D. JONES, Ph.D.**, *Junior Professor of Economics and Industry, University of Michigan.*

Each Volume, half leather, \$1.25 net (Postage 11c.)

THE CITIZENS' LIBRARY

Of Economics, Politics and Sociology

Edited by **RICHARD T. ELY, Ph. D. LL.D.**

Professor of Political Economy and Director of the School of Economics and Political Science in the University of Wisconsin, Author of "Socialism and Social Reform," "Monopolies and Trusts."

"This has already proven itself one of the most fruitful among the different 'libraries' of the sort, in yielding stimulating books upon the modern phases of economic and social science."
—*Public Ledger*, Philadelphia.

THE MOST RECENT ISSUES

SOME ETHICAL GAINS THROUGH LEGISLATION

By FLORENCE KELLEY, *Secretary of the National Consumers' League.*

AN INTRODUCTION TO THE STUDY OF AGRICULTURAL ECONOMICS

By HENRY C. TAYLOR, M.S. Agr., Ph.D., *Assistant Professor of Political Economy in the University of Wisconsin, and Expert in the Office of Experiment Stations, United States Department of Agriculture.*

THE ELEMENTS OF SOCIOLOGY

By FRANK W. BLACKMAR, Ph.D., *Professor of Sociology and Economics in the University of Kansas.*

FOUNDATIONS OF SOCIOLOGY

By EDWARD ALSWORTH ROSS, Ph.D., *Professor of Sociology in the University of Nebraska, Author of "Social Control."*

COLONIAL ADMINISTRATION

By PAUL S. REINSCH, Ph.D., *Professor of Political Science in the University of Wisconsin, Author of "Colonial Government," etc.*

Each, half leather, \$1.25 net (Postage inc.)

PUBLISHED BY

THE MACMILLAN COMPANY

SIXTY-FOUR AND SIXTY-SIX FIFTH AVENUE
NEW YORK

JOHNS HOPKINS UNIVERSITY STUDIES IN Historical and Political Science

THE TWENTY-FIFTH (1907) SERIES WILL CON- TAIN THE FOLLOWING PAPERS:

- INTERNAL TAXATION IN THE PHILLIPINES.** By John S. Hord, Collector of Internal Revenue, Manila. 30 cents.
- THE MONROE MISSION TO FRANCE, 1794-1798.** By B. W. Bond, Jr. 50 cents.
- MARYLAND DURING THE ENGLISH CIVIL WARS.** Part II. By Bernard C. Steiner. 50 cents.
- THE STATE IN CONSTITUTIONAL AND INTERNATIONAL LAW.** By Robert Treat Crane. 50 cents.
- THE FINANCES OF MARYLAND, 1789-1848.** By Hugh S. Hanna.
- THE APPRENTICE AND AMERICAN TRADE UNIONS.** By James M. Motley.

- SERIES VIII.—History, Politics and Education. (Not sold separately.)
- SERIES IX.—Education, Politics and Social Science. (Not sold separately.)
- SERIES X.—Church and State: Columbus and America. 630 pages. \$3.50.
- SERIES XI.—Labor, Slavery and Self-Government. 574 pages. \$3.50.
- SERIES XII.—Institutional and Economic History. 646 pages. \$3.50.
- SERIES XIII.—South Carolina, Maryland and Virginia. 606 pages. \$3.50.
- SERIES XIV.—Baltimore, Slavery and Constitutional History. 588 pages. \$3.50.
- SERIES XV.—American Economic History. 618 pages. \$3.50.
- SERIES XVI.—Anglo-American Relations and Southern History. 624 pages. \$3.50.
- SERIES XVII.—Economic History: Maryland and the South. 600 pages. \$3.50.
- SERIES XVIII.—Taxation in the South: Church and Education. 584 pages. \$3.50.
- SERIES XIX.—Diplomatic and Constitutional History. 650 pages. \$3.50.
- SERIES XX.—Colonial and Economic History. 622 pages. \$3.50.
- SERIES XXI.—Indiana, North Carolina and Maryland. 580 pages. \$3.50.
- SERIES XXII.—Social and Industrial History. 651 pages. \$3.50.
- SERIES XXIII.—Colonies, Revolution, Reconstruction. 700 pages. \$3.50.
- SERIES XXIV.—Diplomatic History: Trade Unions. 832 pages. \$3.50.

RECENT EXTRA VOLUMES.

- AMERICAN OPINION OF THE FRENCH REVOLUTION.** By C. D. HAZEN. 325 pp. Cloth. \$2.00.
- INDUSTRIAL EXPERIMENTS IN THE BRITISH COLONIES OF NORTH AMERICA.** By ELEANOR L. LOWE. 164 pp. Cloth. \$1.25.
- STATE AID TO HIGHER EDUCATION.** 200 pp. \$1.00.
- THE FINANCIAL HISTORY OF BALTIMORE.** By J. H. HOLLANDER. 400 pages. Cloth. \$2.00.
- CUBA AND INTERNATIONAL RELATIONS.** By J. M. CALLAHAN. 508 pp. Cloth. \$3.00.
- THE AMERICAN WORKMAN.** By E. LEVASSEUR. (Translation). 540 pp. Cloth. \$3.00.
- HERBERT B. ADAMS. A Memorial Volume.** 232 pages. Cloth.
- A HISTORY OF SLAVERY IN VIRGINIA.** By J. C. BALLACH. 126 pp. Cloth. \$1.50.
- FINANCE AND ADMINISTRATION IN PROVIDENCE, 1636-1901.** By H. K. STOKES. 474 pp. Cloth. \$3.50.
- AMERICAN DIPLOMACY UNDER TYLER AND POLK.** By J. S. REEVES. 335 pp. \$1.50.

The set of twenty-four series is now offered uniformly bound in cloth for \$80.00.

Subscriptions for the regular Annual Series, with index, \$3.00 (foreign postage 50 cents). Bound in cloth \$3.50.

All business communications should be addressed to

THE JOHNS HOPKINS PRESS, BALTIMORE, MARYLAND.

SECOND EDITION

SCIENTIFIC CONFIRMATIONS OF OLD TESTAMENT HISTORY

By G. FREDERICK WRIGHT

D.D., LL.D., F.G.S.A.

Professor of the Harmony of Science and Revelation in Oberlin College ;
author of "The Logic of Christian Evidences," "Scientific Aspects
of Christian Evidences," "The Ice Age in North America," "Man and the Glacial Period," Etc.

CONTENTS

- I. The Witness of the New Testament.
- II. Middle and Later Jewish History.
- III. Israel in Egypt.
- IV. The Exodus.
- V. Physical Preparation for Israel in Palestine.
- VI. Traditions of the Deluge.
- VII. Scientific Credibility of the Deluge.
- VIII. The Glacial Epoch as a *Vera Causa*.
- IX. Evidences of a Deluge in Europe.
- X. The Evidence of a Deluge in Asia.
- XI. The Deluge in North America.
- XII. The First Chapter of Genesis, and Modern Science.

\$2.00 net; postpaid, \$2.15;

with a year's subscription to the *Bibliotheca Sacra*, \$4.25.

CLOTH, 12mo, 450 PAGES, 40 ILLUSTRATIONS

The Bibliotheca Sacra Company
OBERLIN, OHIO

Librairie Guillaumin et C^{ie}, 14 rue de Richelieu, à Paris

Journal des Economistes

REVUE MENSUELLE

De la Science Économique et de la Statistique

Sommaire du numéro d'octobre 1907

1. Les travaux parlementaires de la Chambre des Députés (Juin 1906 à Juillet 1907), par M. *André Liesse*.—2. Le Canada économique, par M. *Georges de Nouvion*.—3. La crise de la viticulture, par M. *Paul Bonnaud*.—4. Mouvement financier et commercial, par M. *Maurice Zablet*.—5. Revue des principales publications économiques de l'Étranger, par M.M. *René Breton* et *E. Castelot*.—6. Bulletin,—7. Société d'économie politique.—8. Comptes rendus.—9. Chronique.—10. Bulletin bibliographique.
-

Paris:

FELIX ALCAN, Editeur

108 Boulevard Saint Germain

Abonnement six mois 20 fr. ; un an 38 fr

... THE ...

QUARTERLY JOURNAL OF ECONOMICS

Published for Harvard University

Is established for the advancement of knowledge by the full and free discussion of economic questions. The editors assume no responsibility for the views of contributors, beyond a guarantee that they have a good claim to the attention of well-informed readers.

Communications for the editors should be addressed to the Quarterly Journal of Economics, Cambridge, Mass.; business communications and subscriptions (\$3.00 a year), to Geo. H. Ellis Co., 272 Congress Street, Boston, Mass.

CONTENTS FOR AUGUST 1907

- I. THE TREASURY AND THE BANKS UNDER SECRETARY
SHAW A. P. Andrew
- II. THE GROWTH OF THE UNION PACIFIC AND ITS FINANCIAL OPERATIONS Thomas Warner Mitchell
- III. MODES OF CONSTRUCTING INDEX-NUMBERS A. W. Flux
- IV. TAX DISCRIMINATION IN THE PAPER AND PULP INDUSTRY Roswell C. McCrea

NOTES AND MEMORANDA:

Municipal Ownership of Telephones in Great Britain A. N. Holcombe

Industrial Concentration as shown by the Census William Z. Ripley

RECENT PUBLICATIONS UPON ECONOMICS.

CONTENTS FOR NOVEMBER, 1907

- I. MORTGAGE TAXATION IN WISCONSIN T. S. Adams
- II. THE NATURE OF CAPITAL: A REJOINDER E. Bohm-Bawerk
- III. THE RENT CONCEPT, NARROWED AND BROADENED Frank T. Carlton
- IV. AN ILLUSTRATION OF THE CONTINUITY OF THE OPEN FIELD SYSTEM P. Vinogradoff
Appendix: Court Roll of an Oxfordshire Manor
- V. THE TAXATION OF THE UNEARNED INCREMENT IN GERMANY Robert Brunhuber
Appendix: The Cologne Ordinance levying an Increment Tax
- VI. THE TEXAS STOCK AND BOND LAW AND ITS ADMINISTRATION E. T. Miller

NOTES AND MEMORANDA:

Political Economy and Business Economy: Comments on

Fisher's Capital and Income

J. R. Commons

The Meetings of British and of American Economists

T. N. Carver

The Massachusetts Inheritance Tax of 1907

F. W. Taussig

RECENT PUBLICATIONS UPON ECONOMICS

Studies in History, Economics and Public Law
 Edited by the
Faculty of Political Science of Columbia University

Recent Volumes

VOLUME XXVI, 1907. 559 pp. Price, \$3.50.

1. Trade and Currency in Early Oregon.
 By JAMES H. GILBERT, Ph.D. Price, \$1.00.
 By PRESERVED SMITH, Ph.D. Price, \$1.00
2. Luther's Table Talk.
 By MEYER JACOBSTEIN, Ph.D. Price, \$1.50
3. The Tobacco Industry in the United States.
 By ALVAN A. TENNEY, Ph.D. Price, 75 cents
4. Social Democracy and Population.

VOLUME XXVII, 1907. 578 pp. Price, \$3.50.

1. The Economic Policy of Robert Walpole.
 By NORRIS A. BRISCO, Ph.D. Price, \$1.50.
2. The United States Steel Corporation.
 By ABRAHAM BERGLUND, Ph.D. Price, \$1.50.
3. The Taxation of Corporations in Massachusetts.
 By HARRY G. FRIEDMAN, Ph.D. Price, \$1.50.

VOLUME XXVIII, 1907. 564 pp. Price, \$3.50.

1. DeWitt Clinton and the Origin of the Spoils System in New York.
 By HOWARD LEE MCBAIN, Ph.D. Price, \$1.50.
2. The Development of the Legislature of Colonial Virginia.
 By E. I. MILLER, Ph.D. Price, \$1.50.
3. The Distribution of Ownership.
 By JOSEPH HARDING UNDERWOOD, Ph.D. Price, \$1.50.

VOLUME XXIX, 1908.

1. Early New England Towns.
 By ANNE BUSH MACLEAR. (*In press.*)
2. The Enforcement of the Statute of Laborers.
 By BERTHA HAVEN PUTMAN, Ph.D. (*In press.*)

VOLUME IV, No. 2, Second Edition, 1908.

- * The Inheritance Tax. By MAX WEST, Ph.D. Price, \$2.00.
 Completed revised and enlarged.

The price for each volume is for the set of monographs in paper. Each volume, as well as the separate monographs marked, can be supplied in cloth bound copies, for 50c. additional.*

The set of twenty-eight volumes (except that Vol. II can be supplied only in unbound nos. 2 and 3) is offered bound for \$89. Volumes I, III and IV can be supplied only in connection with complete sets.

For further information, apply to

Prof. EDWIN R. A. SELIGMAN, Columbia University,
 or to The MACMILLAN COMPANY, New York.
 London: P. S. KING & SON, Orchard House, Westminster.

NOVEMBRE 1907

GIORNALE DEGLI ECONOMISTI

SOMMARIO.

	Pag.
I. La Situazione Finanziaria, X	955
II. Una Visione Cinematografica della Scienza Economica (1870-1907), M. PANTALEONI	964
III. La Tecnica Finanziaria come Materia d'Indagine Teorica e di Studi Teorico-Descrittivi, . . . V. TANGORRA	998
IV. Della Necessita' di Unificare la Terminologia Economica, E. SELLA	1051
V. L'Economia Politica nell'Insegnamento Secondario, U. RICCI	1018
VI. Correlazioni e Causalita' nei fatti Economici, . A. GRAZIANI	1029
VII. Sulla Statistica delle Religioni, FORNASARI	1041
VIII. L'Economia Politica e il Sistema delle Scienze, COSSA	1047
IX. Sull'uso delle Formule Empiriche nell'Economia Applicata, R. BENINI	1053
X. Un Teorema di Economia del Lavoro, . . . G. MONTEMARTINI	1064
XI. Le Variazioni di Mortalita' Seconda gli anni di Eta', A. BENEDUCE	1069
XII. Cronaca del Congresso e Verbali delle Sedute della XIV Sezione, U. RICCI	1105
XIII. Cronaca, F. PAPAFAVA	1121

Tutte le Memorie comprese nel presente fascicolo sono state comunicate al 1° Congresso della Società Italiana per il Progresso delle Scienze, di Parma, Settembre 1907 (Sezione XIV).

Si danno in allegati i verbali delle sedute della Sezione.

DIREZIONE, VIA MONTE SAVELLO, PALAZZO ORSINI

ROMA

Publications of the American Economic Association

FIRST SERIES
VOLUME I, 1886

No.		Price in paper
1.	Report of Organization of the American Economic Association. Pp. 46.	\$. 50
2-3.	*Relation of the Modern Municipality to the Gas Supply. By E. J. James. Pp. 66.	.75
4.	Co-operation in a Western City. By Albert Shaw. Pp. 106.	.75
5.	*Co-operation in New England. By Edward W. Bemis. Pp. 136.	.75
6.	*Relation of the State to Industrial Action. By Henry C. Adams. Pp. 85.	.75

VOLUME II, 1887

1.	Three phases of Co-operation in the West. By Amos G. Warner. Pp. 119.	.75
2.	Historical Sketch of the Finances of Pa. By T. K. Worthington. Pp. 106.	.75
3.	The Railway Question. By Edmund J. James. Pp. 68.	.75
4.	The Early History of the English Woolen Industry. By W. J. Ashley. Pp. 85.	.75
5.	Mediæval Guilds of England. By Edwin R. A. Seligman. Pp. 113.	.75
6.	Relation of Modern Municipalities to Quasi-Public Works. By H. C. Adams and others. Pp. 87.	.75

VOLUME III, 1888

1.	Statistics in College, by C. D. Wright; Sociology and Political Economy, by F. H. Giddings; The Legal-Tender Decisions, by E. J. James. Pp. 80.	.75
2.	Capital and its Earnings. By John B. Clark. Pp. 69.	.75
3.	The Manual Laboring Class, by F. A. Walker; Mine Labor in the Hocking Valley, by E. W. Bemis; Report of the Second Annual Meeting. Pp. 86.	.75
4-5.	**Statistics and Economics. By Richard Mayo-Smith. Pp. 127.	1.00
6.	The Stability of Prices. By Simon N. Patten. Pp. 64.	.75

VOLUME IV, 1889

1.	Contributions to the Wages Question; The Theory of Wages, by Stuart Wood; Possibility of a Scientific Law of Wages, by J. B. Clark. Pp. 69.	.75
2.	Socialism in England. By Sidney Webb. Pp. 73.	.75
3.	Road Legislation for the American State. By J. W. Jenks. Pp. 83.	.75
4.	Third Annual Meeting: Report of the Proceedings. Pp. 123.	.75
5.	Malthus and Ricardo, by S. N. Patten; The Study of Statistics, by D. R. Dewey; Analysis in Political Economy, by W. W. Folwell. Pp. 69.	.75
6.	*An Honest Dollar. By E. Benjamin Andrews. Pp. 50.	.75

VOLUME V, 1890

1.	The Industrial Transition in Japan. By Yeihiro Ono. Pp. 122.	1.00
2.	Two Essays on Child-Labor. By Willoughby and de Graffenried. Pp. 150.	.75
3-4.	Papers on the Canal Question. By E. J. James and L. M. Haupt. Pp. 85.	1.00
5.	History of the New York Property Tax. By J. C. Schwab. Pp. 108.	1.00
6.	The Educational Value of Political Economy. By S. N. Patten. Pp. 36.	.75

VOLUME VI, 1891

1-2.	Fourth Annual Meeting: Report, Papers, Discussions.	\$1.00
3.	Government Forestry. Papers by Pinchot, Bowers, and Fernow. Pp. 102.	.75
4-5.	Municipal Ownership of Gas in the United States. By E. W. Bemis. Pp. 185.	1.00
	State Railroad Commissions. By Frederick C. Clark. Pp. 110.	.75

Publications of the American Economic Association

VOLUME VII, 1892

No.		Price in paper
1.	The Silver Situation in the United States. By F. W. Taussig. Pp. 118.	.75
2-3.	**Shifting and Incidence of Taxation. By E. R. A. Seligman. Pp. 192.	1.00
4-5.	Sinking Funds. By Edward A. Ross. Pp. 106.	1.00
6.	The Reciprocity Treaty with Canada of 1854. By F. E. Haynes. Pp. 70.	.75

VOLUME VIII, 1893

1.	Fifth Annual Meeting: Report of the Proceedings. Pp. 130.	.75
2-3.	Housing of the Poor in American Cities. By M. T. Reynolds. Pp. 132.	1.00
4-5.	Public Assistance of the Poor in France. By Emily G. Balch. Pp. 180.	1.00
6.	First Stages of the Tariff Policy of the U. S. By William Hill. Pp. 162.	1.00

VOLUME IX, 1894

	Sixth Annual Meeting: Hand-Book and Report. Pp. 130.	.50
1-2.	Progressive Taxation in Theory and Practice. By Edwin R. A. Seligman. Pp. 222. (<i>In cloth \$1.50.</i>)	1.00
3.	The Theory of Transportation. By Charles H. Cooley. Pp. 148.	.75
4.	Sir William Petty. By Wilson Lloyd Bevan. Pp. 102.	.55
5-6.	Papers on Labor Problems. By J. B. Clark, C. D. Wright, D. R. Dewey, A. T. Hadley, and J. G. Brooks. Pp. 94.	.75

VOLUME X, 1895

	Seventh Annual Meeting: Hand-Book and Report. Pp. 138.	.50
1-3.	The Canadian Banking System, 1817-1890. By R. M. Breckenridge. Pp. 478. (<i>In cloth \$2.50.</i>)	1.50
4.	Poor Laws of Massachusetts and New York. By John Cummings. Pp. 136.	.75
5-6.	Letters of Ricardo to McCulloch, 1816-1823. Edited by J. H. Hollander. Pp. 204. (<i>In cloth \$2.00.</i>)	1.25

VOLUME XI, 1896

1-3.	Race Traits and Tendencies of the American Negro. By F. L. Hoffman. Pp. 330. (<i>In cloth \$2.00.</i>)	1.25
4.	Appreciation and Interest. By Irving Fisher. Pp. 110.	.75
	General Index to Volumes I-XI (1886-1896).	.25

(Supplied free to owners of sets upon application to the Secretary.)

Any volume in paper, \$4.00; in cloth, \$5.00 for a single volume, \$4.00 for each additional volume ordered at the same time. Vol. XI, in paper, \$2.00; in cloth, \$2.50. Set of 11 volumes in cloth, with index, \$41.00.

*Numbers starred are sold only with the set; but those double starred can be obtained in revised edition, issued by The Macmillan Co.

NOTE.—During 1896-1899 the Association issued its publications in two series, viz.: the bi-monthly Economic Studies, and the "new series" of larger monographs printed at irregular intervals. In 1900 it reverted to the policy of issuing its monographs, now called the "third series" of the publications, at irregular quarterly intervals.

Publications of the American Economic Association

ECONOMIC STUDIES

VOLUME I, 1896

- | No. | | Price in paper |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | Eighth Annual Meeting: Hand-Book and Report. Pp. 178. | .50 |
| 1. | The Theory of Economic Progress, by J. B. Clark; The Relation of Changes in the Volume of the Currency to Prosperity, by F. A. Walker. Pp. 46. | .50 |
| 2. | The Adjustment of Wages to Efficiency. Three papers: Gain Sharing, by H. R. Nowne; The Premium Plan, by F. A. Halsey; A Piece-Rate System, by F. W. Taylor. Pp. 83. | .50 |
| 3. | The Populist Movement. By Frank L. McVey. Pp. 81. | .50 |
| 4. | The Present Monetary Situation. By W. Lexis. Translated by John Cummings. Pp. 72. | .75 |
| 5-6. | The Street Railway Problem in Cleveland. By W. R. Hopkins. Pp. 94. | .50 |

VOLUME II, 1897

- | | | |
|----|-------------------------------------------------------------------------------------------------------------------------------------------|-----|
| | Ninth Annual Meeting: Hand-Book and Report. Pp. 162. | .50 |
| 1. | Economics and Jurisprudence. By Henry C. Adams. Pp. 48. | .50 |
| 2. | The Saloon Question in Chicago. By John E. George. Pp. 62. | .50 |
| 3. | The General Property Tax in California. By Carl C. Plehn. Pp. 88. | .50 |
| 4. | Area and Population of U. S. at Eleventh Census. By W. F. Willcox. Pp. 60. | .50 |
| 5. | A Discussion Concerning the Currencies of the British Plantations in America, etc. By William Douglass. Edited by C. J. Bullock. Pp. 228. | .50 |
| 6. | Density and Distribution of Population in U. S. at Eleventh Census. By W. F. Willcox. Pp. 79. | .50 |

VOLUME III, 1898

- | | | |
|----|----------------------------------------------------------------------------------------------------------|-----|
| | Tenth Annual Meeting: Hand-Book and Report. Pp. 136. | .50 |
| 1. | Government by Injunction. By William H. Dunbar. Pp. 44. | .50 |
| 2. | Economic Aspects of Railroad Receiverships. By H. H. Swain. Pp. 118. | .50 |
| 3. | The Ohio Tax Inquisitor Law. By T. N. Carver. Pp. 50. | .50 |
| 4. | The American Federation of Labor. By Morton A. Aldrich. Pp. 54. | .50 |
| 5. | Housing of the Working People in Yonkers. By Ernest L. Bogart. Pp. 82. | .50 |
| 6. | The State Purchase of Railways in Switzerland. By Horace Michellie; translated by John Cummings. Pp. 72. | .50 |

VOLUME IV, 1899

- | | | |
|----------------|-----------------------------------------------------------------------------------------------------------------------|------|
| | Eleventh Annual Meeting: Hand-Book and Report. Pp. 126. | .50 |
| 1. | I. Economics and Politics. By A. T. Hadley. II. Report on Currency Reform. III. Report on the Twelfth Census. Pp. 70. | .50 |
| 2. | Personal Competition. By Charles H. Cooley. Pp. 104. | .50 |
| 3. | Economics as a School Study. By Frederick R. Clow. Pp. 72. | .50 |
| 4-5. | The English Income Tax. By J. A. Hill. Pp. 162. | 1.00 |
| 6 (and last) * | The Effects of Recent Changes in Monetary Standards upon the Distribution of Wealth. By Francis S. Kinder. Pp. 91. | .50 |

Price of the Economic Studies \$2.50 per volume in paper, \$3.00 in cloth. The set of four volumes, in cloth, \$10.00.

NEW SERIES

- | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------|--------|
| 1. | The Cotton Industry. By M. B. Hammond. Pp. 382. (In cloth \$2.00.) | \$1.50 |
| 2. | Scope and Method of the Twelfth Census. Critical discussion by over twenty statistical experts. Pp. 625. (In cloth \$2.50.) | 2.00 |
| | Both volumes, in cloth, \$4.00. | |

